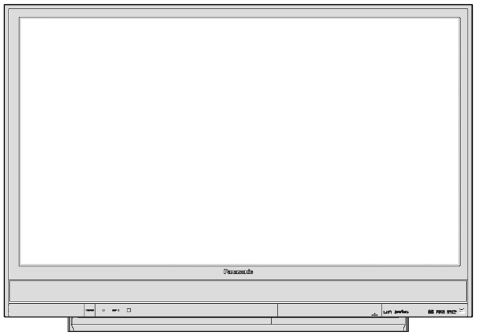
ORDER NO. MKE0706853CE

Service Manual

Multi Media Display



PbF
Solder Lead free

PT-50LCZ70
PT-56LCZ70
PT-61LCZ70
PT-50LCZ7
PT-56LCZ7
PT-61LCZ7
PT-50LCZ70-K
PT-56LCZ70-K
PT-61LCZ70-K

Vol. 2

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

© 2007 Panasonic Shikoku Electronics Co., Ltd. All rights reserved. Unauthorized copying and distribution is a violation of law.

CONTENTS

Page

1 Service Navigation **3**
  1.1. Introduction 3
  1.2. About Lead Free Solder (PbF) 3
2 Service Mode **4**
3 Troubleshooting Guide **11**
  3.1. Troubleshooting Hints for Component Level Repair 11
4 Service Fixture & Tools **27**
  4.1. Service Fixture and Tools 27
  4.2. Service Position 29
  4.3. Replacement Procedures for CSP (Chip Size Package) IC 37
5 Disassembly and Assembly Instructions **41**
  5.1. Optical Section 41
6 Measurements and Adjustments **49**
  6.1. Adjustment Procedures 2 49
7 Maintenance **56**
  7.1. Cleaning Methods 56
8 Block Diagrams **57**
9 Schematic Diagrams **65**

Page

  9.1. SCHEMATIC DIAGRAM & CIRCUIT BOARD LAYOUT NOTES 65
  9.2. MAIN SCHEMATIC DIAGRAMS 66
  9.3. DRIVE SCHEMATIC DIAGRAMS 89
10 Printed Circuit Board **99**
  10.1. MAIN P.C.B. 99
  10.2. DRIVE P.C.B. 109
11 Appendix Information of Schematic Diagram **111**
  11.1. CHECKING POINT TABLE OF THE CSP IC 111
  11.2. WAVEFORM TABLE 116
12 Exploaded Views **118**
  12.1. OPTICAL UNIT SECTION 118
  12.2. MAIN P.C.B. UNIT AND TOP DUCT UNIT SECTION 119
13 Replacement Parts List **120**
  13.1. REPLACEMENT NOTES 120
  13.2. MECHANICAL REPLACEMENT PARTS LIST 121
  13.3. SERVICE FIXTURES AND TOOLS REPLACEMENT PARTS LIST 121
  13.4. ELECTRICAL REPLACEMENT PARTS LIST 121

1 Service Navigation

1.1. Introduction

This service manual contains technical information which will allow service personnel´s to understand and service this model. Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplement service manual to be filed with original service manual.

1.2. About Lead Free Solder (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF printing on the PCB.
(Please refer to figures.)

M1248
W124
MTWTFSS
PbF
W6403
ASSY.NO.LSEP2063 A

Printed case

CAUTION:

- **Pb free solder has a higher melting point than standard solder;
Typically the melting point is 50 °F - 70 °F (30 °C - 40 °C) higher.
Please use a soldering iron with temperature control and adjust it to 700 °F±20 °F (370 °C± 10 °C).
In case of using high temperature soldering iron, please be carefull not to heat too long.**
- **Pb free solder will tend to splash when heated too high (about 1100 °F/600 °C).**
- **All products with the printed circuit board with PbF stamp or printing must be serviced with lead free solder.
When soldering or unsoldering, completely remove all of the solder from the pins or solder area,
and be sure to heat the soldering points with the lead free solder until it melts sufficiently.**

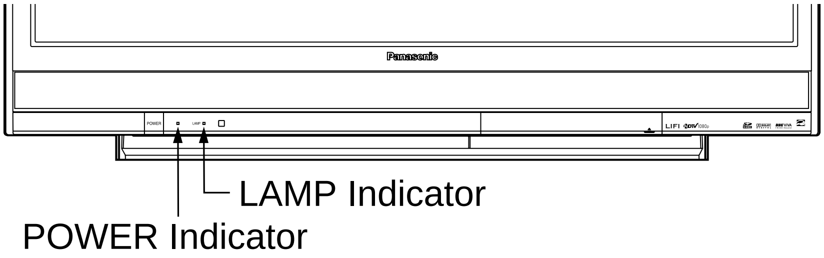
Recommendations

Recommended lead free solder composition is Sn96.5 Ag3.0 Cu0.5.

2 Service Mode

INDICATIONS FOR ERROR CONDITIONS

Each Indicator facilitates finding the cause of an error.
When an error is detected, the Lamp goes off and the indicators on the front flash.

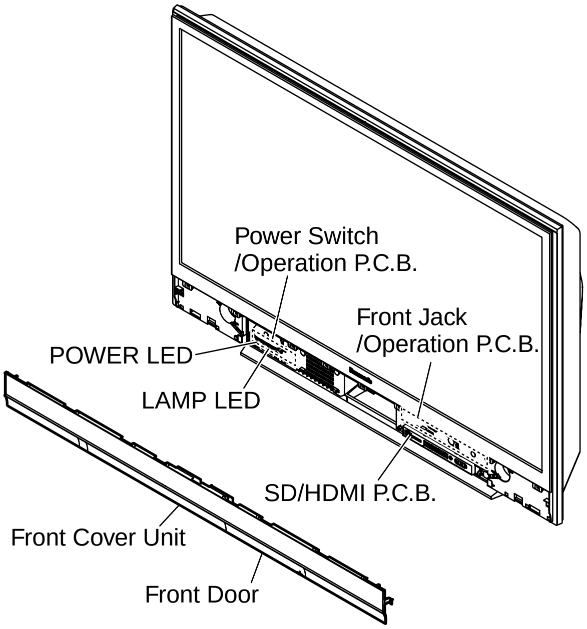


Priority	Error Information	POWER Indicator flashes orange	LAMP Indicator flashes red	SOS (Note 1)	LAMP OFF	RESET
1	Over voltage/Over current (SOS)	1	-	01	○	AC ON/OFF
2	Abnormal voltage (DTV+9V line)	2	-	02	○	
3	Abnormal voltage (SUB+5V line)	3	-	03	○	
4	Abnormal voltage (MAIN+3.3V line)	4	-	04	○	
5	IC4501 (Audio Amp) failure	6	-	06	○	
6	Communication error between Peaks (IC8001) and TV Microcontroller (IC6004)	7	-	07	○	
7	Communication error between Peaks (IC8001) and TV Microcontroller (IC6004)	9	-	09	○	
12	Lamp does not light up	-	2	02	○	Power ON/OFF
9	Lamp failure	-	3	03	○	
10	Abnormal Lamp temperature	-	4	04	○	
11	Lamp communication error	-	5	05	○ (Note 2)	
14	Lamp Fan stops	-	8	08	○	AC ON/OFF
15	Fan Case Unit (OPT Fan) stops	-	9	09	○	
16	Front Fan or Rear Fan stops	-	10	0A	○	
17	Rear Fan or Front Fan stops	-	11	0B	○	
13	Rear Jack PCB connection error	-	12	0C	○	
8	Abnormal Lamp input voltage (+26V)	-	13	0D	○	Power ON/OFF

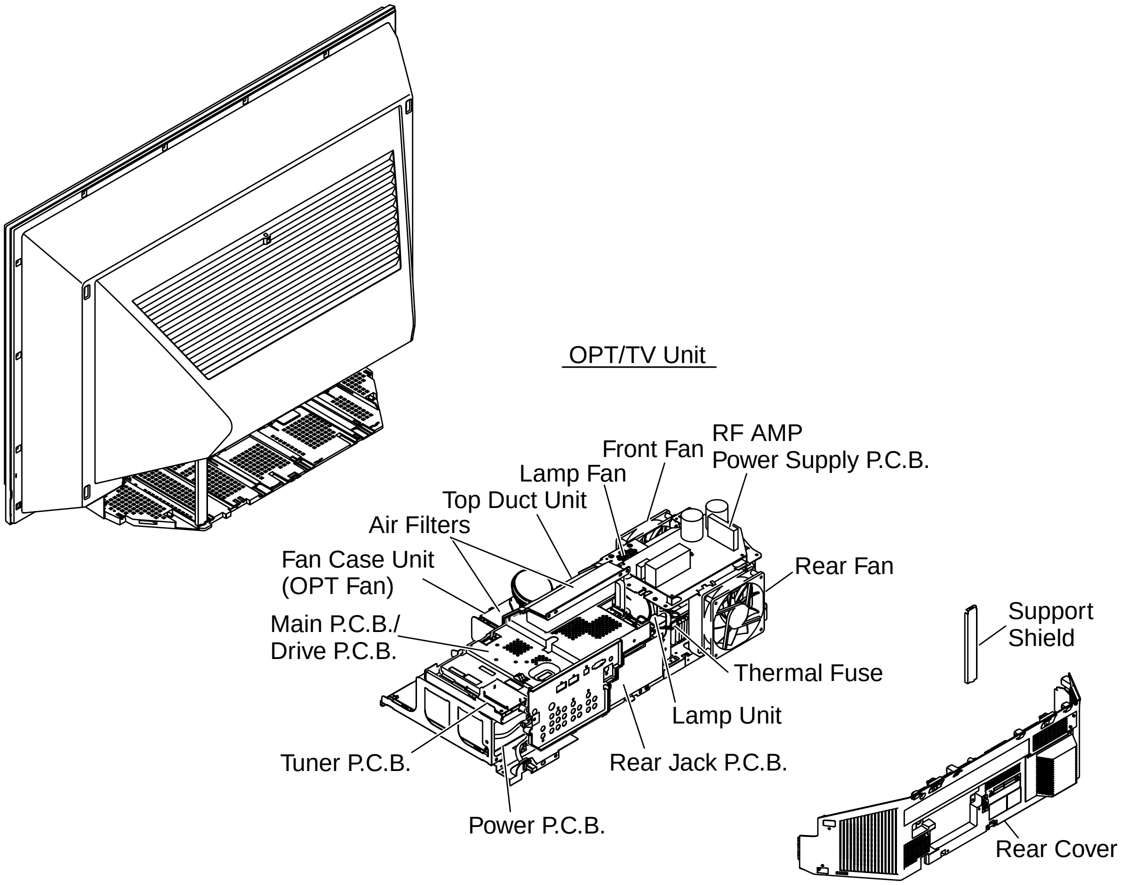
Note:
1. The detected Error data will be stored in the EEPROM, and SOS History (Code) is displayed in Self Check mode or Service Adjust mode (SRV-TOOL).
2. The Lamp Indicator will flash X5 immediately after the Lamp goes off. For this SOS only, the TV power will remain on.

MAIN PARTS LOCATION

<Front View>


Power Switch
/Operation P.C.B.
Front Jack
/Operation P.C.B.
POWER LED
LAMP LED
SD/HDMI P.C.B.
Front Cover Unit
Front Door

<Rear View>


OPT/TV Unit
Front Fan
RF AMP
Power Supply P.C.B.
Lamp Fan
Top Duct Unit
Air Filters
Fan Case Unit
(OPT Fan)
Rear Fan
Support
Shield
Main P.C.B./
Drive P.C.B.
Thermal Fuse
Lamp Unit
Tuner P.C.B.
Rear Jack P.C.B.
Power P.C.B.
Rear Cover

SERVICE ADJUST MODE

In this mode, the following information can be confirmed on the screen:

ADJUST
- Contrast adjustment

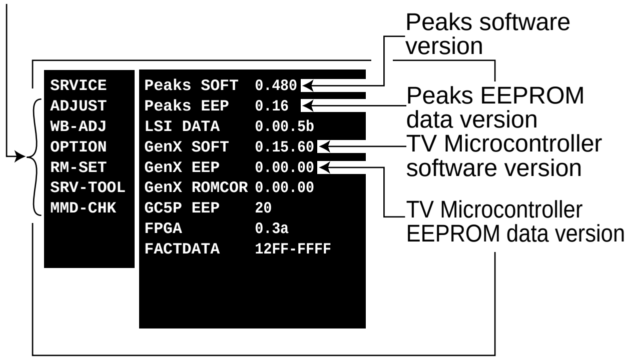
WB-ADJ
- White Balance adjustment

OPTION
- Current Lamp elapsed time

RM-SET (Not used for service)

SRV-TOOL
- SOS History
- The number of times of the power has turned on
- Current Power on elapsed time

MMD-CHK
- Focus, Tilt, H/V Picture Position adjustment
- Internal pattern for LCD-CHK, GC-CHK



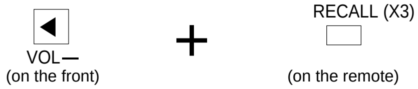
```
SRVICE      Peaks SOFT  0.480
ADJUST      Peaks EEP   0.16
WB-ADJ      LSI DATA    0.00.5b
OPTION      GenX SOFT   0.15.60
RM-SET      GenX EEP    0.00.00
SRV-TOOL    GenX ROMCOR 0.00.00
MMD-CHK     GC5P EEP    20
            FPGA        0.3a
            FACTDATA    12FF-FFFF
```

Peaks software version
Peaks EEPROM data version
TV Microcontroller software version
TV Microcontroller EEPROM data version

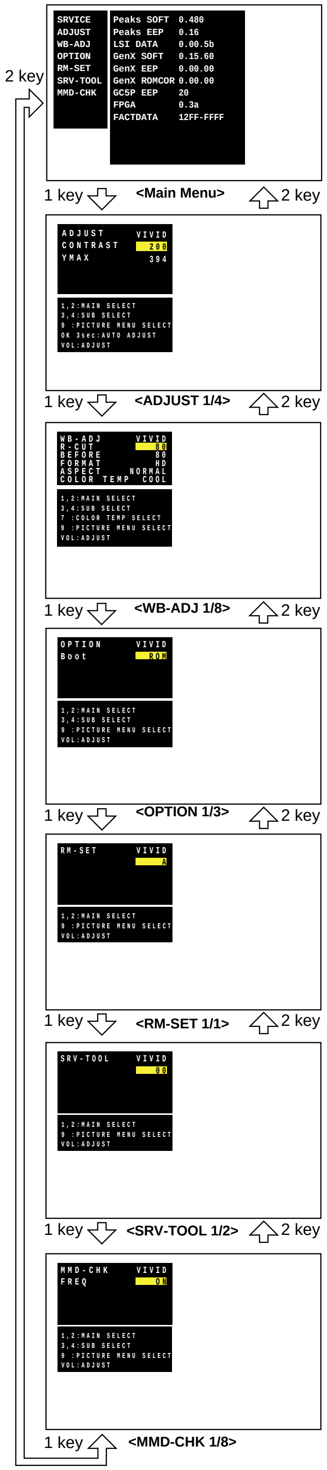
<Main Menu>

Service Adjust Mode

Enter:
VOLUME DOWN button + RECALL key (3 times)
(in power on condition)



VOL—
(on the front)
+
RECALL (X3)
(on the remote)



2 key
<Main Menu>
1 key
2 key
<ADJUST 1/4>
1 key
2 key
<WB-ADJ 1/8>
1 key
2 key
<OPTION 1/3>
1 key
2 key
<RM-SET 1/1>
1 key
2 key
<SRV-TOOL 1/2>
1 key
2 key
<MMD-CHK 1/8>
1 key

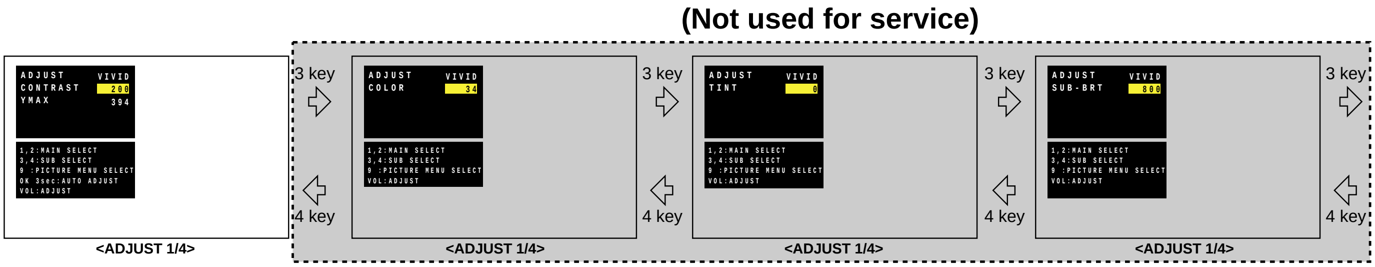
CAUTION:
Do not change any parameters!

Exit from Main Menu:
Power OFF.

Fig. 2-1

ADJUST 1/4~4/4

Perform the Contrast adjustment by pressing OK key when replacing EEPROM IC (IC8201).



<ADJUST 1/4>

```
ADJUST      VIVID
CONTRAST      200
YMAX          394

1,2:MAIN SELECT
3,4:SUB SELECT
9 :PICTURE MENU SELECT
OK 3sec:AUTO ADJUST
VOL:ADJUST
```

<ADJUST 1/4>

```
ADJUST      VIVID
COLOR          34

1,2:MAIN SELECT
3,4:SUB SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<ADJUST 1/4>

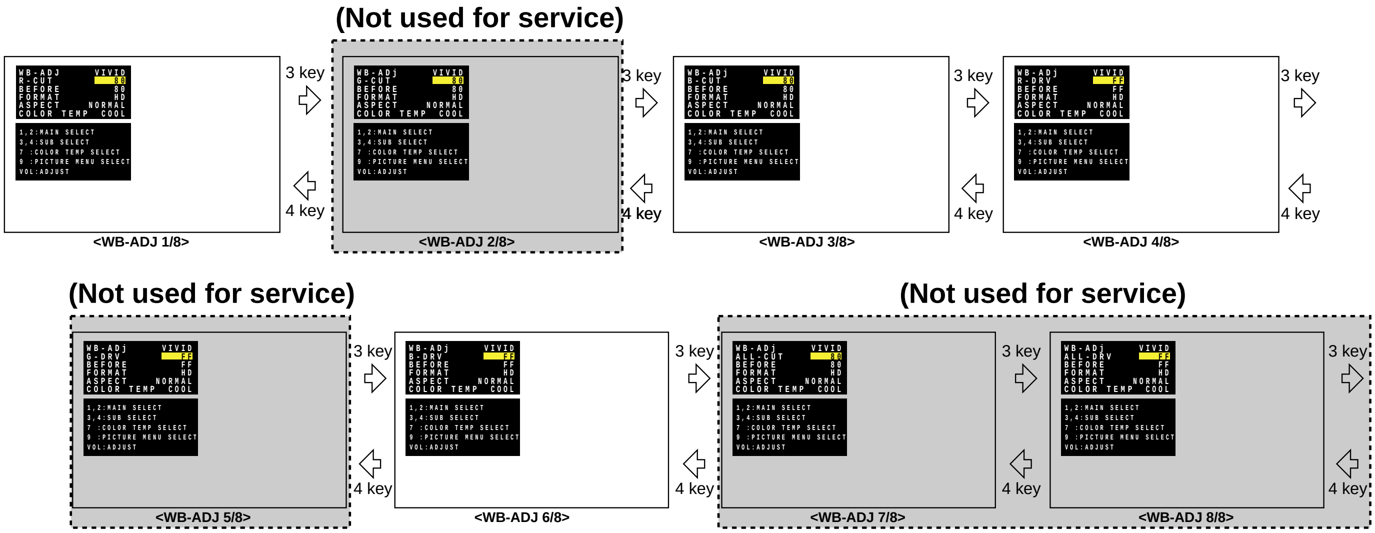
```
ADJUST      VIVID
TINT            0

1,2:MAIN SELECT
3,4:SUB SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<ADJUST 1/4>

```
ADJUST      VIVID
SUB-BRT       800

1,2:MAIN SELECT
3,4:SUB SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

WB-ADJ 1/8~8/8

Perform the White Balance adjustment by pressing VOL+/- key.



<WB-ADJ 1/8>

```
WB-ADJ      VIVID
R-CUT          80
BEFORE         80
FORMAT         HD
ASPECT     NORMAL
COLOR TEMP   COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 2/8>

```
WB-ADj      VIVID
G-CUT          80
BEFORE         80
FORMAT         HD
ASPECT     NORMAL
COLOR TEMP   COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 3/8>

```
WB-ADj      VIVID
B-CUT          80
BEFORE         80
FORMAT         HD
ASPECT     NORMAL
COLOR TEMP   COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 4/8>

```
WB-ADj      VIVID
R-DRV          FF
BEFORE         FF
FORMAT         HD
ASPECT     NORMAL
COLOR TEMP   COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 5/8>

```
WB-ADj      VIVID
G-DRV          FF
BEFORE         FF
FORMAT         HD
ASPECT     NORMAL
COLOR TEMP   COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 6/8>

```
WB-ADj      VIVID
B-DRV          FF
BEFORE         FF
FORMAT         HD
ASPECT     NORMAL
COLOR TEMP   COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 7/8>

```
WB-ADj      VIVID
ALL-CUT        80
BEFORE         80
FORMAT         HD
ASPECT     NORMAL
COLOR TEMP   COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 8/8>

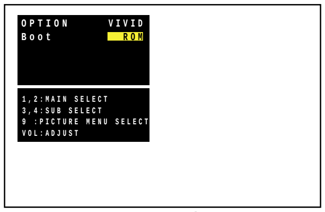
```
WB-ADj      VIVID
ALL-DRV        FF
BEFORE         FF
FORMAT         HD
ASPECT     NORMAL
COLOR TEMP   COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

Fig. 2-2

OPTION 1/3~3/3

Confirm the current elapsed “Lamp operation” time in hours, in hexadecimal. (limit: FFFF)

Current elapsed "Lamp operation" time
eg.) `01F5`
501 hour

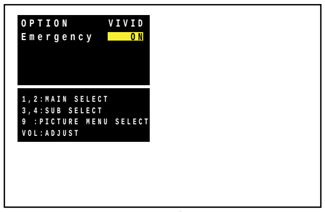


```
OPTION       VIVID
Boot           ROM

1,2:MAIN SELECT
3,4:SUB SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<OPTION 1/3>

3 key

4 key

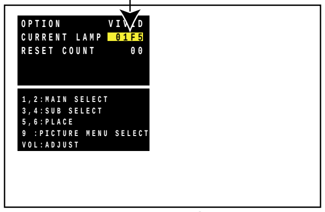


```
OPTION       VIVID
Emergency       ON

1,2:MAIN SELECT
3,4:SUB SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<OPTION 2/3>

3 key

4 key



```
OPTION       VIVID
CURRENT LAMP  01F5
RESET COUNT     00

1,2:MAIN SELECT
3,4:SUB SELECT
5,6:PLACE
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<OPTION 3/3>

3 key

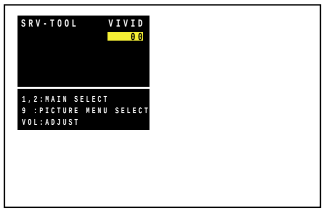
4 key

SRV-TOOL 1/2~2/2

Confirm the number of times the power has turned on, the current elapsed “Power on” time in hours and minutes. (limit: 65535:00) and SOS History.

Current elapsed "Power on" time
eg.) `Time 00512:20`
512 hour /20 min.

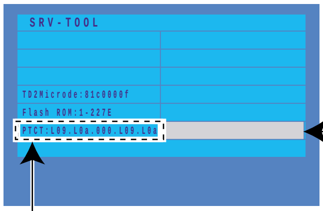
The number of times the power has turned on
eg.) `Count 0000048`
48 times



```
SRV-TOOL     VIVID
                00

1,2:MAIN SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```

<SRV-TOOL 1/2>

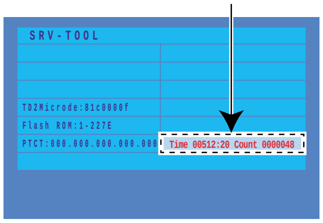
OK key



```
SRV-TOOL

TD2Microde:81c0000f
Flash ROM:1-227E
PTCT:L09.L0a.000.L09.L0a
```

<SRV-TOOL 2/2>

Select and
MUTE key
(for over 3 sec.)



```
SRV-TOOL

TD2Microde:81c0000f
Flash ROM:1-227E
PTCT:000.000.000.000.000  Time 00512:20 Count 0000048
```

<SRV-TOOL 2/2>

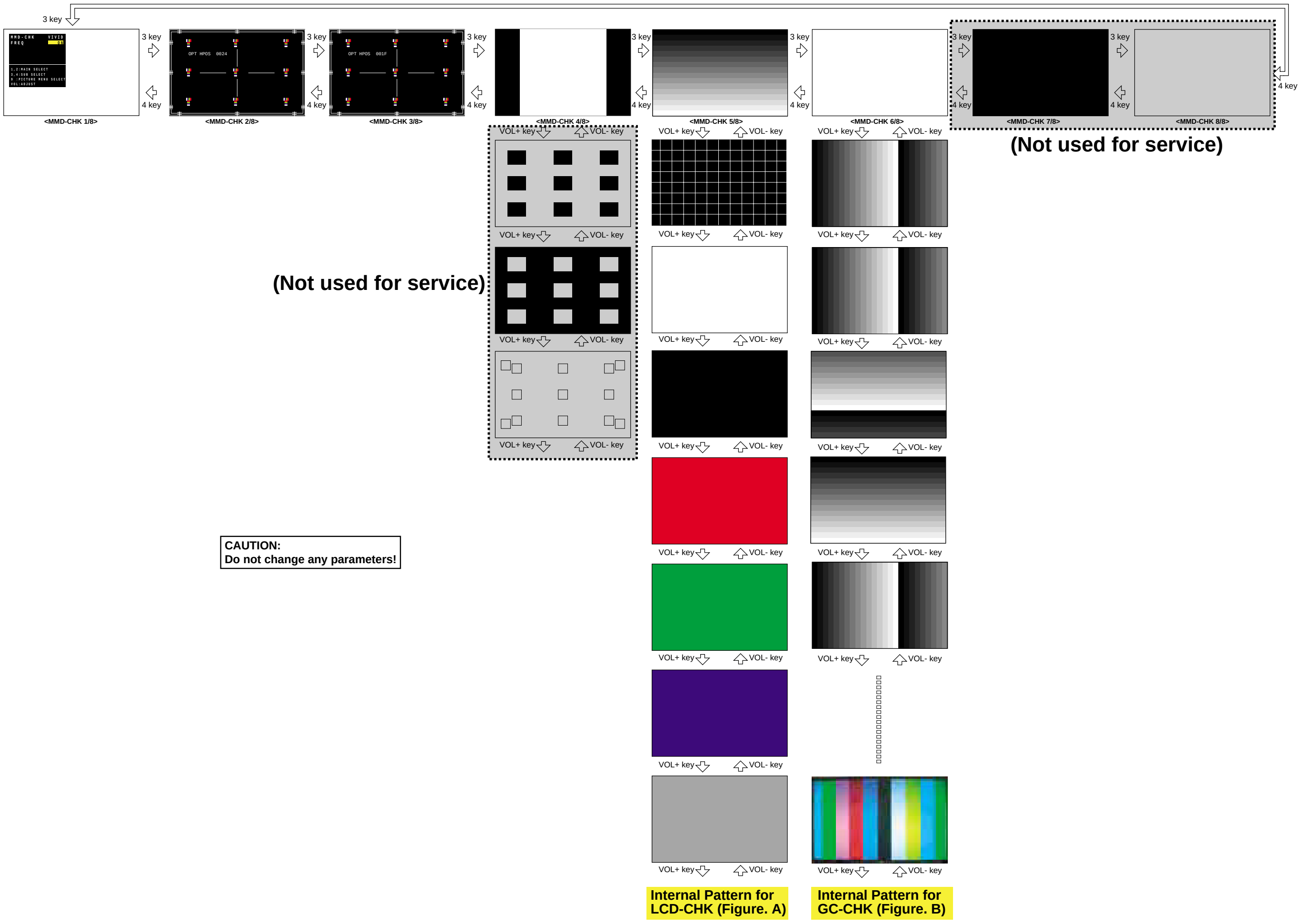
SOS History
eg.) `PTCT: P04.L0b.L0b.P04.L0b`

the 1st SOS after shipment/last self check
the 2nd SOS after shipment/last self check
the SOS before previous
previous SOS
latest SOS

Exit from SRV-TOOL 2/2:
Unplug the AC Cord.

MMD-CHK 1/8~8/8 and internal pattern

Perform the Picture Position adjustment by pressing VOL+/- key, and display the internal pattern for LCD-CHK, GC-CHK.


3 key
MMD-CHK VIVID
FREQ ON
1,2:MAIN SELECT
3,4:SUB SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
<MMD-CHK 1/8>
3 key
4 key
OPT HPOS 0024
<MMD-CHK 2/8>
OPT HPOS 001F
<MMD-CHK 3/8>
<MMD-CHK 4/8>
<MMD-CHK 5/8>
<MMD-CHK 6/8>
<MMD-CHK 7/8>
<MMD-CHK 8/8>
VOL+ key
VOL- key

(Not used for service)

(Not used for service)

CAUTION:
Do not change any parameters!

Internal Pattern for LCD-CHK (Figure. A)

Internal Pattern for GC-CHK (Figure. B)

Note:

Press 1 key to return Main Menu.

EEPROM IC (IC5504) CAUTION

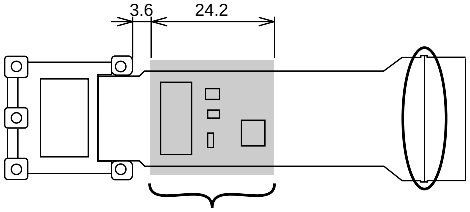
DO NOT copy any of data of EEPROM IC (IC5504) on the Main P.C.B. using the ROM Writer. (It has HDCP key data.)

EEPROM IC (IC8201) CAUTION

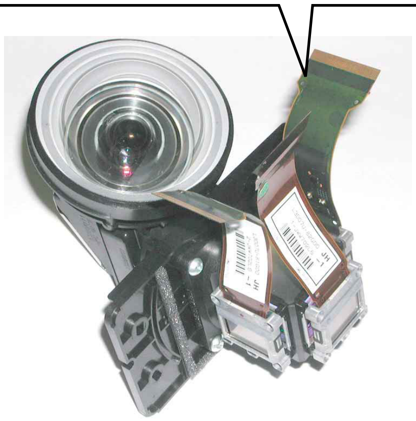
DO NOT copy any of data of EEPROM IC (IC8201) on the Main P.C.B. using the ROM Writer. (It has CPRM key data of GallayPlayer.)

LCD PANEL FPC HANDLING CAUTION

CAUTION:
Use extreme caution to avoid damage when handling the LCD Panel F.P.C.
Do not bend, twist, or give any pressure to the following area of the LCD Panel F.P.C.



Do not bend over R50 (curvature).



LAMP CAUTION

The Lamp Unit becomes very hot during operation. When replacing the Lamp Unit, wait until it has cooled off (1 hour or more).

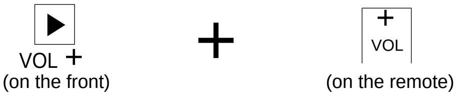
TOP DUCT UNIT NOTE

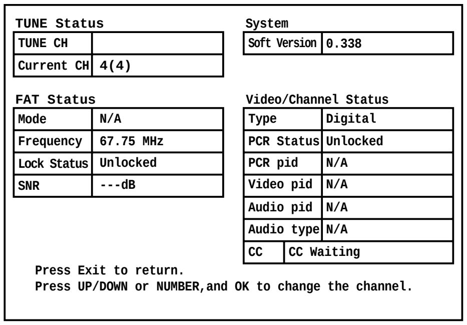
The optical parts will be exposed to the dust in the air when the Top Duct Unit is removed. Therefore, it is strongly recommend to remove the Top Duct Unit only in a clean room.

TUNER DIAGNOSTIC MODE

TUNER DIAGNOSTIC

Enter:
VOLUME UP button + VOLUME UP key
(for more than 5 seconds in power on condition)





TUNE Status

TUNE CH	
Current CH	4(4)

System

Soft Version	0.338

FAT Status

Mode	N/A
Frequency	67.75 MHz
Lock Status	Unlocked
SNR	---dB

Video/Channel Status

Type	Digital
PCR Status	Unlocked
PCR pid	N/A
Video pid	N/A
Audio pid	N/A
Audio type	N/A
CC	CC Waiting

```
Press Exit to return.
Press UP/DOWN or NUMBER,and OK to change the channel.
```

<Tuner Diagnostic>

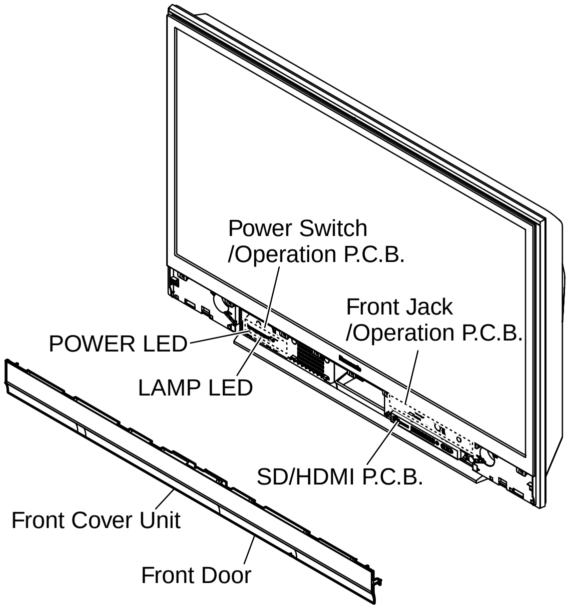
Exit:
Press EXIT key.

3 Troubleshooting Guide

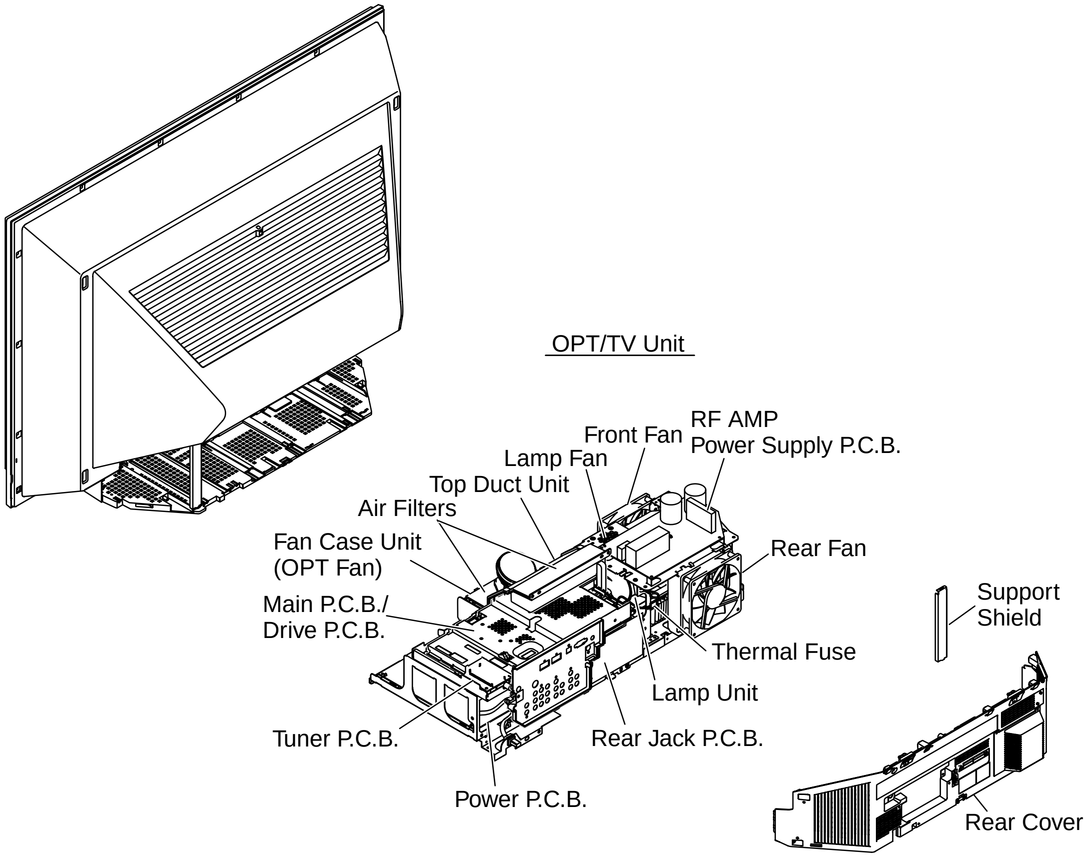
3.1. Troubleshooting Hints for Component Level Repair

MAIN PARTS LOCATION

<Front View>

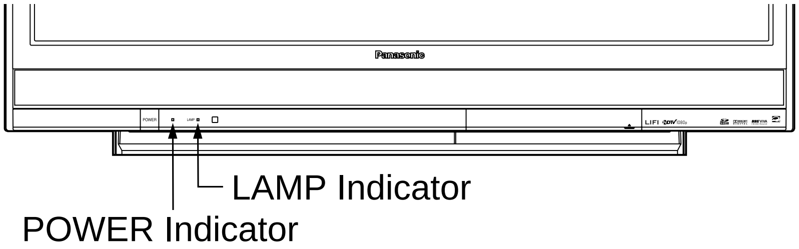

Power Switch
/Operation P.C.B.
Front Jack
/Operation P.C.B.
POWER LED
LAMP LED
SD/HDMI P.C.B.
Front Cover Unit
Front Door

<Rear View>


OPT/TV Unit
RF AMP
Power Supply P.C.B.
Front Fan
Lamp Fan
Top Duct Unit
Air Filters
Fan Case Unit
(OPT Fan)
Rear Fan
Support
Shield
Main P.C.B./
Drive P.C.B.
Thermal Fuse
Lamp Unit
Tuner P.C.B.
Rear Jack P.C.B.
Power P.C.B.
Rear Cover

INDICATIONS FOR ERROR CONDITIONS

Each Indicator facilitates finding the cause of an error.
When an error is detected, the Lamp goes off and the indicators on the front flash.



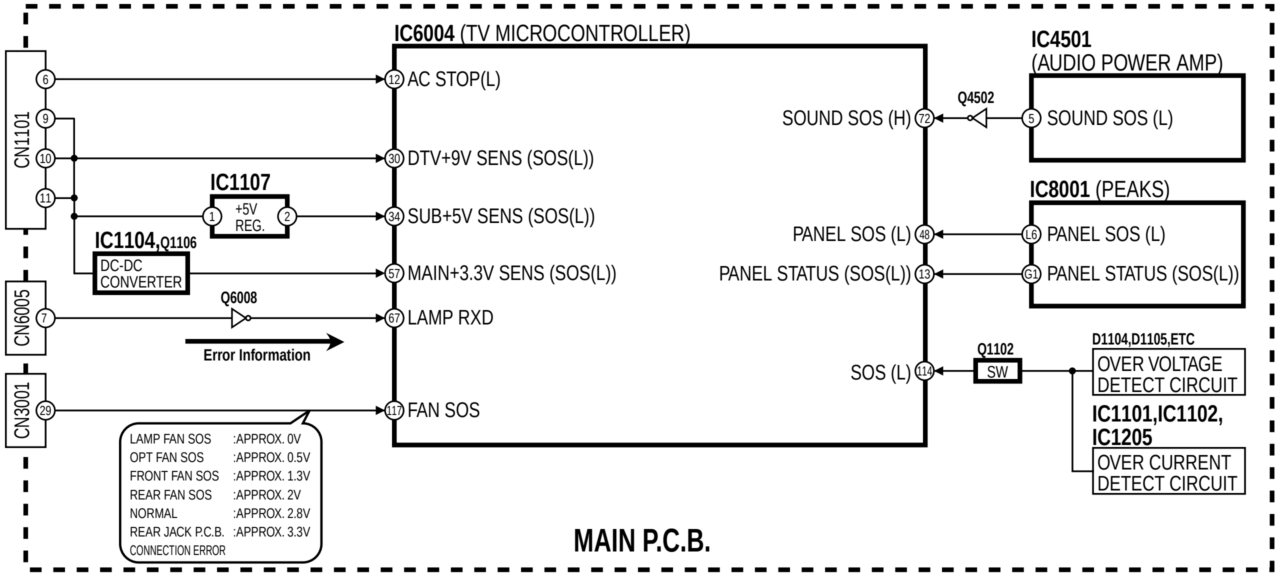
Priority	Error Information	POWER Indicator flashes orange	LAMP Indicator flashes red	SOS (Note 1)	LAMP OFF	RESET
1	Over voltage/Over current (SOS)	1	-	01	○	AC ON/OFF
2	Abnormal voltage (DTV+9V line)	2	-	02	○	
3	Abnormal voltage (SUB+5V line)	3	-	03	○	
4	Abnormal voltage (MAIN+3.3V line)	4	-	04	○	
5	IC4501 (Audio Amp) failure	6	-	06	○	
6	Communication error between Peaks (IC8001) and TV Microcontroller (IC6004)	7	-	07	○	
7	Communication error between Peaks (IC8001) and TV Microcontroller (IC6004)	9	-	09	○	
12	Lamp does not light up	-	2	02	○	Power ON/OFF
9	Lamp failure	-	3	03	○	
10	Abnormal Lamp temperature	-	4	04	○	
11	Lamp communication error	-	5	05	○ (Note 2)	
14	Lamp Fan stops	-	8	08	○	AC ON/OFF
15	Fan Case Unit (OPT Fan) stops	-	9	09	○	
16	Front Fan or Rear Fan stops	-	10	0A	○	
17	Rear Fan or Front Fan stops	-	11	0B	○	
13	Rear Jack PCB connection error	-	12	0C	○	
8	Abnormal Lamp input voltage (+26V)	-	13	0D	○	Power ON/OFF

Note:

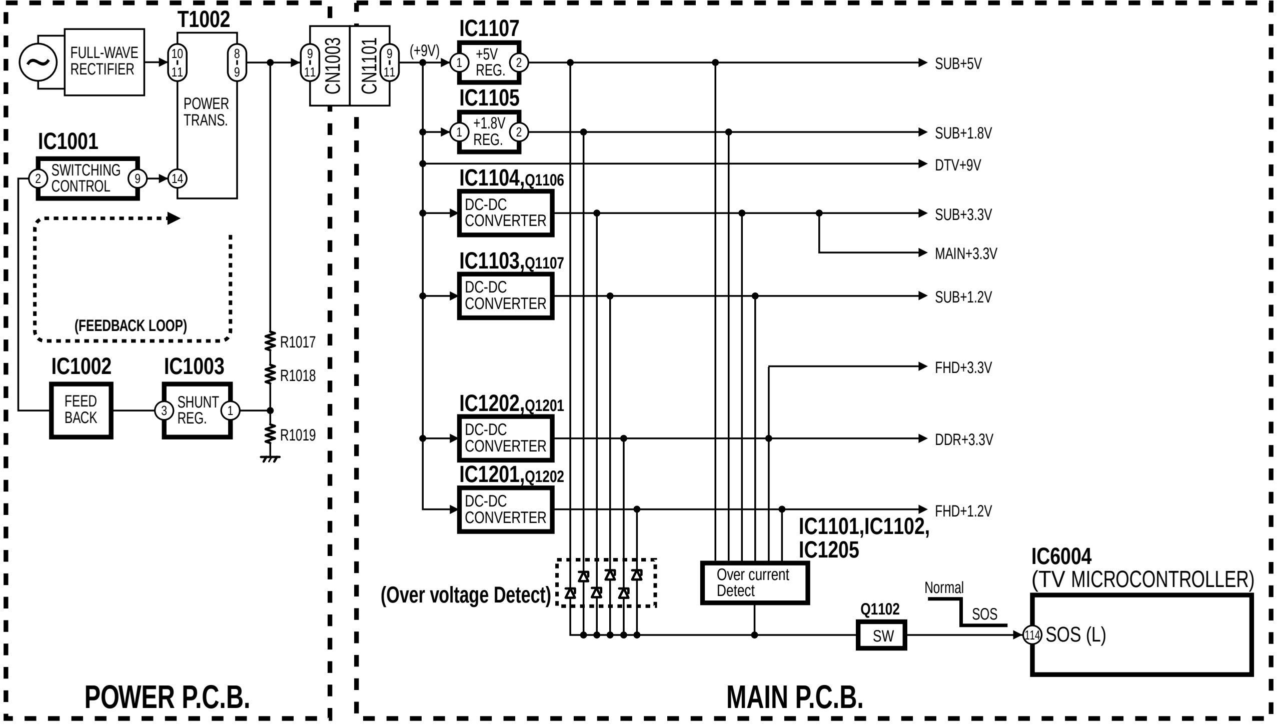
1. The detected Error data will be stored in the EEPROM, and SOS History (Code) is displayed in Self Check mode or Service Adjust mode (SRV-TOOL).
2. The Lamp Indicator will flash X5 immediately after the Lamp goes off. For this SOS only, the TV power will remain on.

Protection Circuit

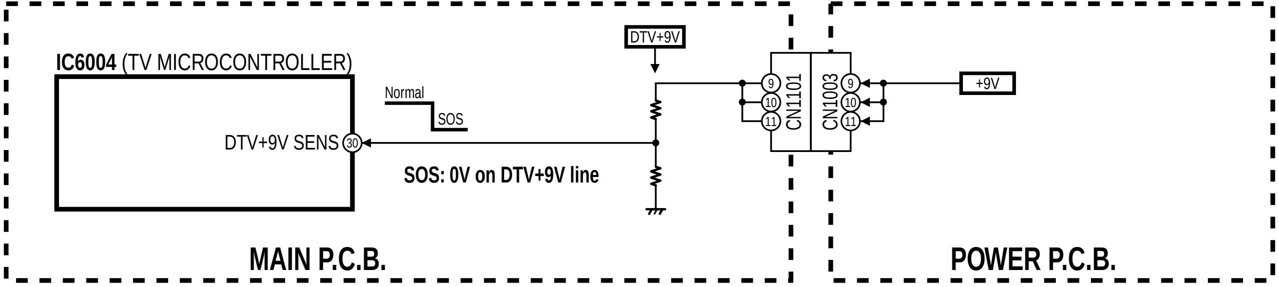
SOS terminal of IC6004 (TV microcontroller)


CN1101
6
9
10
11
IC6004 (TV MICROCONTROLLER)
12 AC STOP(L)
30 DTV+9V SENS (SOS(L))
IC1107
1 +5V REG. 2
34 SUB+5V SENS (SOS(L))
IC1104,Q1106
DC-DC CONVERTER
57 MAIN+3.3V SENS (SOS(L))
CN6005
7
Q6008
67 LAMP RXD
Error Information
CN3001
29
117 FAN SOS
LAMP FAN SOS :APPROX. 0V
OPT FAN SOS :APPROX. 0.5V
FRONT FAN SOS :APPROX. 1.3V
REAR FAN SOS :APPROX. 2V
NORMAL :APPROX. 2.8V
REAR JACK P.C.B. :APPROX. 3.3V
CONNECTION ERROR
IC4501
(AUDIO POWER AMP)
Q4502
SOUND SOS (H) 72
5 SOUND SOS (L)
IC8001 (PEAKS)
PANEL SOS (L) 48
L6 PANEL SOS (L)
PANEL STATUS (SOS(L)) 13
G1 PANEL STATUS (SOS(L))
Q1102
SW
SOS (L) 114
D1104,D1105,ETC
OVER VOLTAGE DETECT CIRCUIT
IC1101,IC1102, IC1205
OVER CURRENT DETECT CIRCUIT
MAIN P.C.B.

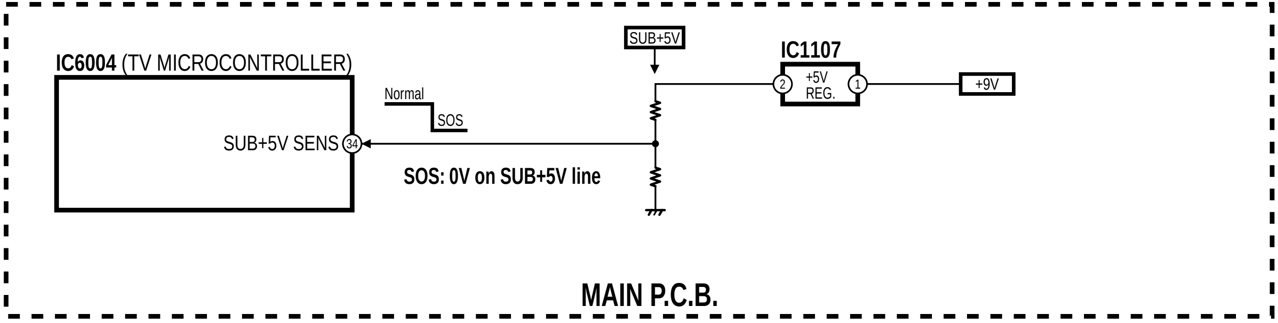
[POWER Indicator one blink] Over voltage/current detection circuit


T1002
FULL-WAVE RECTIFIER
10 11
8 9
POWER TRANS.
IC1001
2 SWITCHING CONTROL 9
14
(FEEDBACK LOOP)
R1017
R1018
R1019
IC1002
FEED BACK
IC1003
3 SHUNT REG. 1
9 11 CN1003
CN1101 9 11
(+9V)
IC1107
1 +5V REG. 2
SUB+5V
IC1105
1 +1.8V REG. 2
SUB+1.8V
DTV+9V
IC1104,Q1106
DC-DC CONVERTER
SUB+3.3V
MAIN+3.3V
IC1103,Q1107
DC-DC CONVERTER
SUB+1.2V
FHD+3.3V
IC1202,Q1201
DC-DC CONVERTER
DDR+3.3V
IC1201,Q1202
DC-DC CONVERTER
FHD+1.2V
IC1101,IC1102, IC1205
(Over voltage Detect)
Over current Detect
Normal
SOS
Q1102
SW
IC6004
(TV MICROCONTROLLER)
114 SOS (L)
POWER P.C.B.
MAIN P.C.B.

[POWER Indicator two blinks] Abnormal voltage (DTV+9V) detection circuit

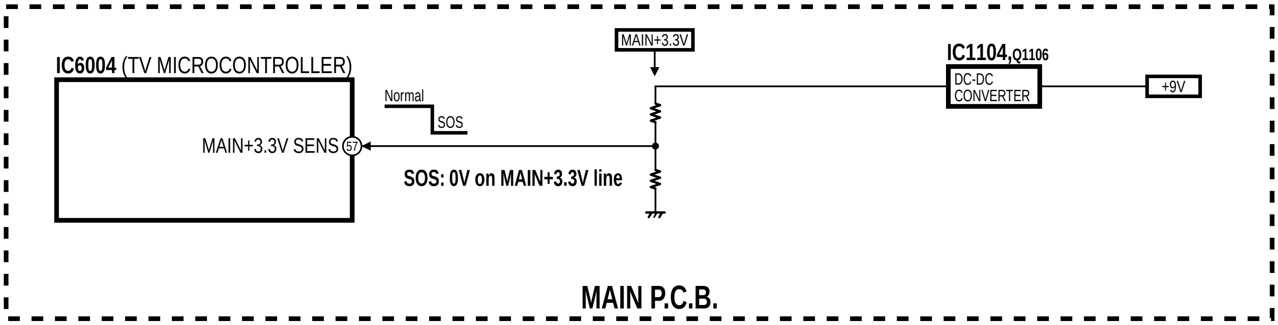

IC6004 (TV MICROCONTROLLER)
DTV+9V SENS 30
Normal
SOS
DTV+9V
SOS: 0V on DTV+9V line
CN1101
9 10 11
CN1003
9 10 11
+9V
MAIN P.C.B.
POWER P.C.B.

[POWER Indicator three blinks] Abnormal voltage (SUB+5V line) detection circuit



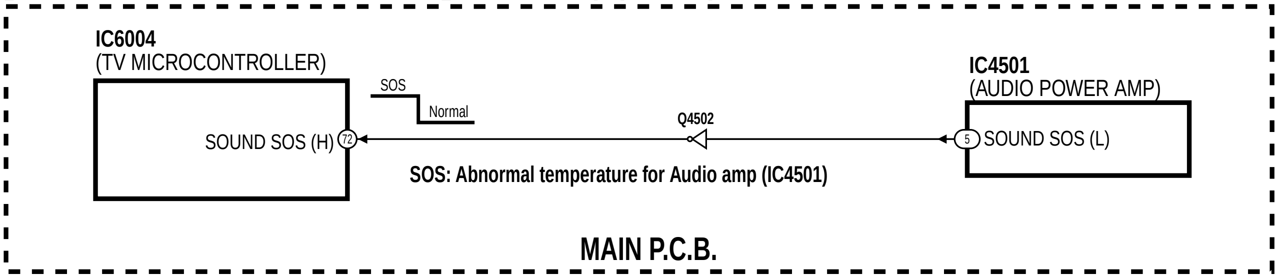
IC6004 (TV MICROCONTROLLER)
SUB+5V SENS
34
Normal
SOS
SUB+5V
IC1107
2
+5V REG.
1
+9V
SOS: 0V on SUB+5V line
MAIN P.C.B.

[POWER Indicator four blinks] Abnormal voltage (MAIN+3.3V line) detection circuit



IC6004 (TV MICROCONTROLLER)
MAIN+3.3V SENS
57
Normal
SOS
MAIN+3.3V
IC1104,Q1106
DC-DC CONVERTER
+9V
SOS: 0V on MAIN+3.3V line
MAIN P.C.B.

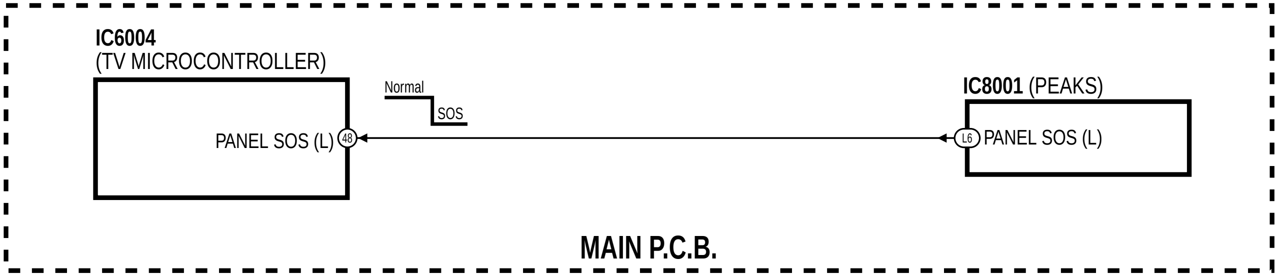
[POWER Indicator six blinks] Audio Amp (IC4501) failure detection circuit



IC6004
(TV MICROCONTROLLER)
SOUND SOS (H)
72
SOS
Normal
Q4502
IC4501
(AUDIO POWER AMP)
5
SOUND SOS (L)
SOS: Abnormal temperature for Audio amp (IC4501)
MAIN P.C.B.

[POWER Indicator seven blinks]

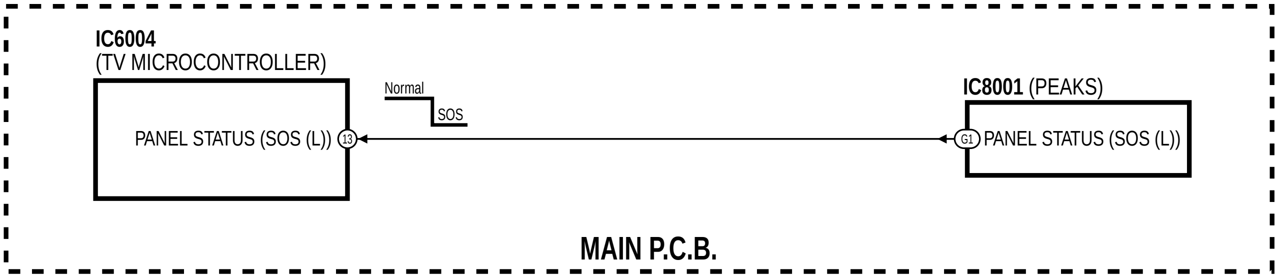
Communication error between Peaks (IC8001) and TV microcontroller (IC6004) detection circuit



IC6004
(TV MICROCONTROLLER)
PANEL SOS (L)
48
Normal
SOS
IC8001 (PEAKS)
L6
PANEL SOS (L)
MAIN P.C.B.

[POWER Indicator nine blinks]

Communication error between Peaks (IC8001) and TV microcontroller (IC6004) detection circuit


IC6004
(TV MICROCONTROLLER)
PANEL STATUS (SOS (L))
13
Normal
SOS
IC8001 (PEAKS)
G1
PANEL STATUS (SOS (L))
MAIN P.C.B.

[LAMP Indicator two blinks]

Lamp does not light up detection circuit

[LAMP Indicator three blinks]

Lamp failure detection circuit

[LAMP Indicator four blinks]

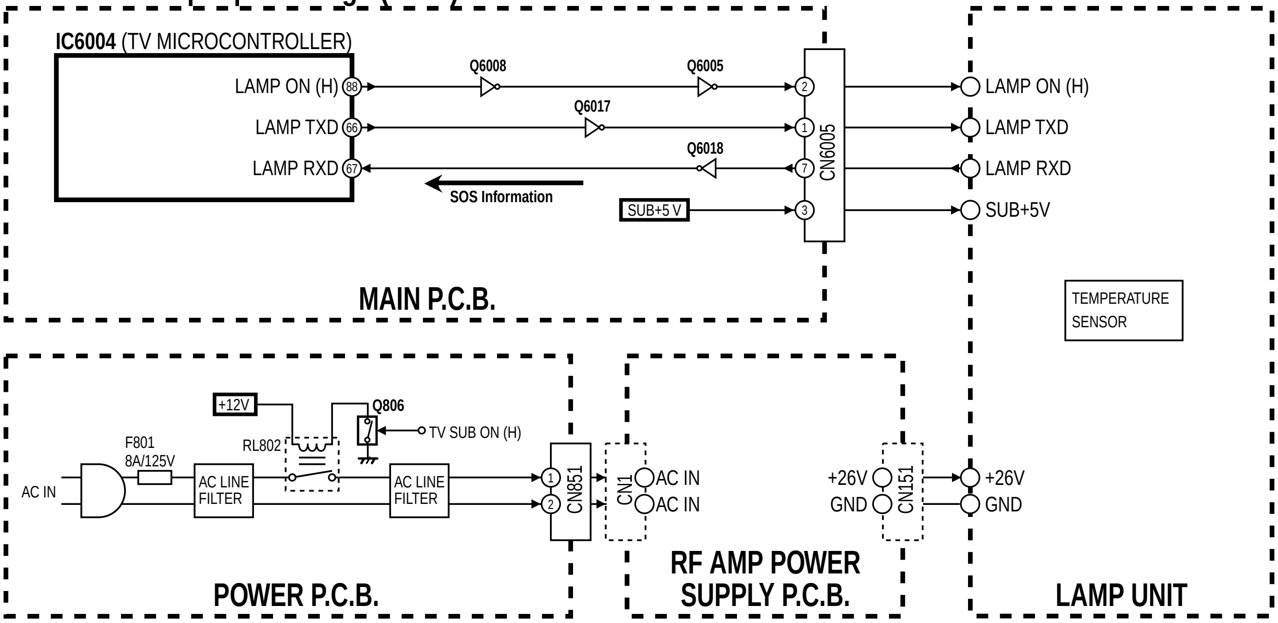
Abnormal Lamp temperature detection circuit

[LAMP Indicator five blinks]

Lamp communication error detection circuit

[LAMP Indicator thirteen blinks]

Abnormal Lamp input voltage (+26V) detection circuit


IC6004 (TV MICROCONTROLLER)
LAMP ON (H)
88
LAMP TXD
66
LAMP RXD
67
Q6008
Q6005
Q6017
Q6018
SOS Information
SUB+5 V
2
1
7
3
CN6005
MAIN P.C.B.
LAMP ON (H)
LAMP TXD
LAMP RXD
SUB+5V
TEMPERATURE SENSOR
+12V
Q806
TV SUB ON (H)
F801
8A/125V
RL802
AC IN
AC LINE FILTER
AC LINE FILTER
1
2
CN851
CN1
AC IN
AC IN
+26V
GND
CN151
+26V
GND
POWER P.C.B.
RF AMP POWER SUPPLY P.C.B.
LAMP UNIT

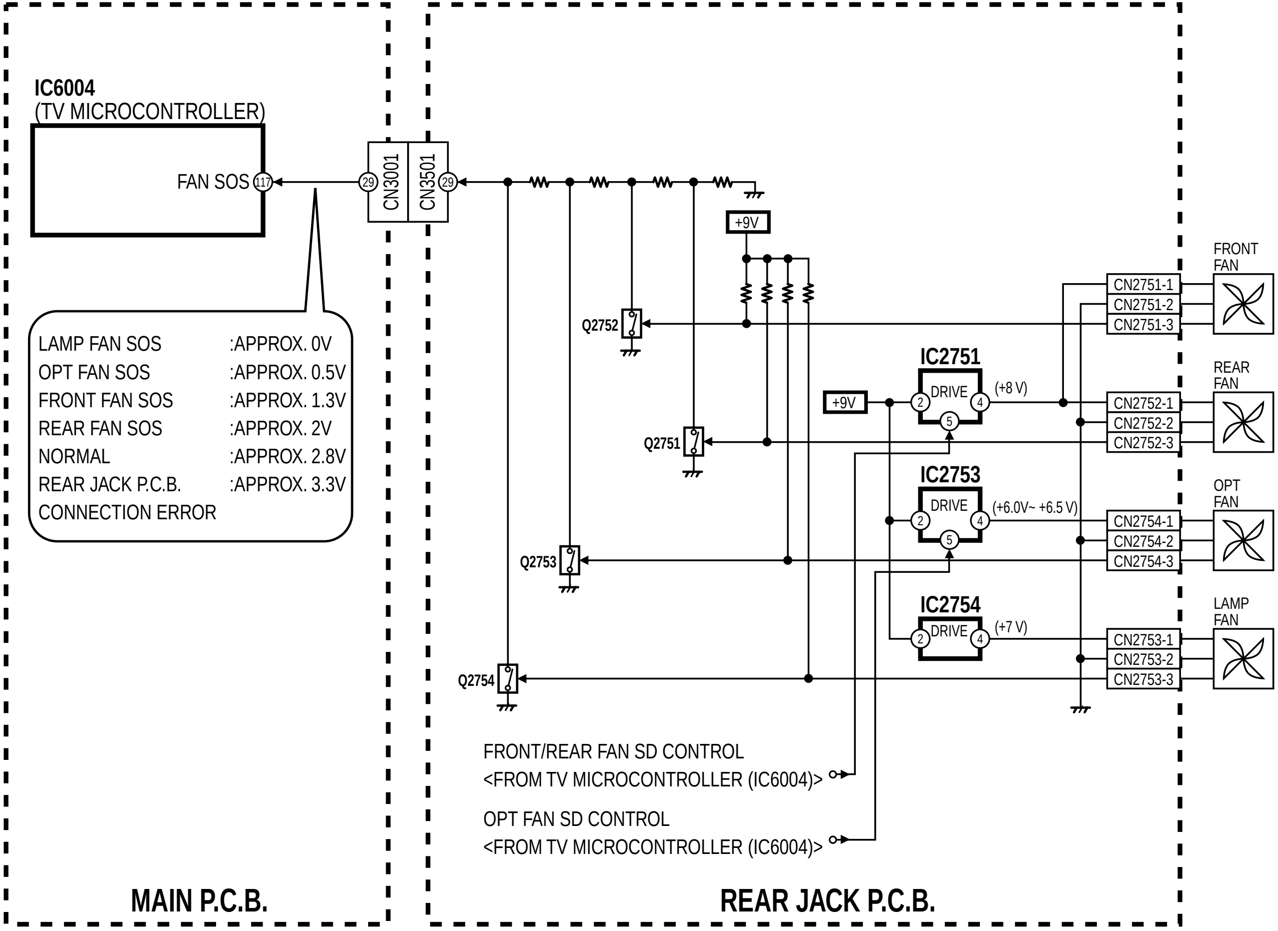
[LAMP Indicator eight blinks] LAMP Fan stops detection circuit

[LAMP Indicator nine blinks] OPT Fan stops detection circuit

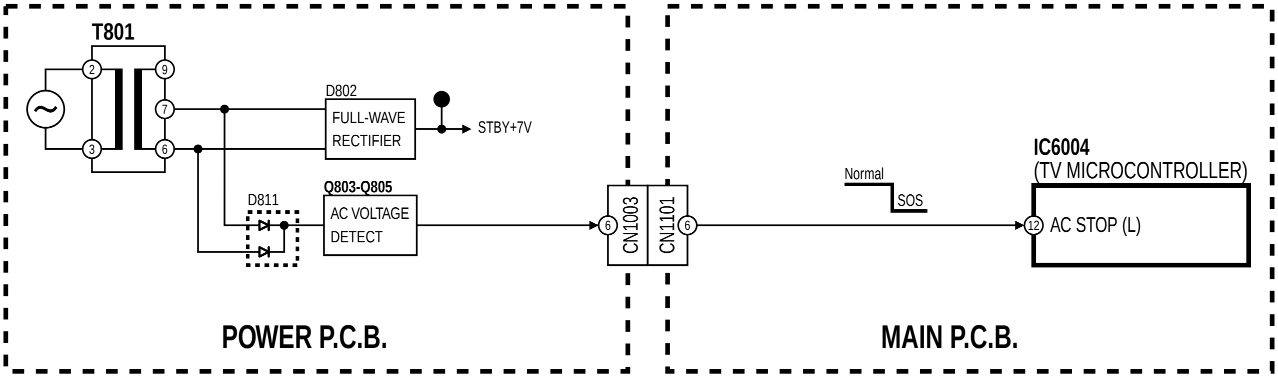
[LAMP Indicator ten blinks] Front Fan or Rear Fan stops detection circuit

[LAMP Indicator eleven blinks] Rear Fan or Front Fan stops detection circuit

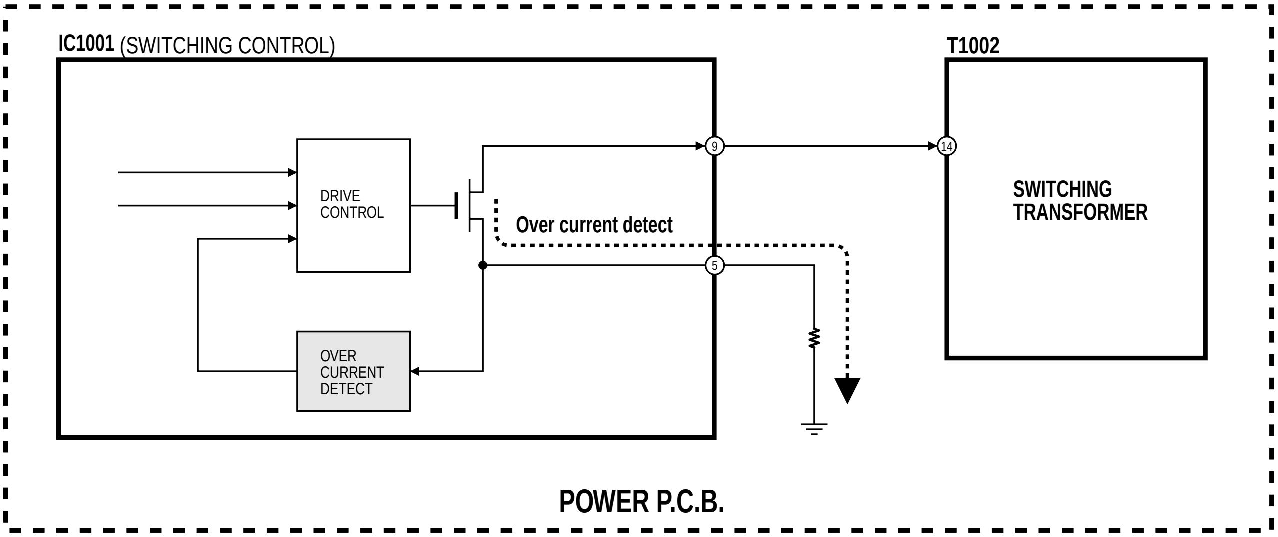
[LAMP Indicator twelve blinks] Rear Jack P.C.B. connection error detection circuit


IC6004
(TV MICROCONTROLLER)
FAN SOS
117
29
CN3001
CN3501
29
+9V
LAMP FAN SOS :APPROX. 0V
OPT FAN SOS :APPROX. 0.5V
FRONT FAN SOS :APPROX. 1.3V
REAR FAN SOS :APPROX. 2V
NORMAL :APPROX. 2.8V
REAR JACK P.C.B. CONNECTION ERROR :APPROX. 3.3V
Q2752
IC2751
DRIVE
+9V
2
4
5
(+8 V)
Q2751
IC2753
DRIVE
2
4
5
(+6.0V~ +6.5 V)
Q2753
IC2754
DRIVE
2
4
(+7 V)
Q2754
FRONT FAN
CN2751-1
CN2751-2
CN2751-3
REAR FAN
CN2752-1
CN2752-2
CN2752-3
OPT FAN
CN2754-1
CN2754-2
CN2754-3
LAMP FAN
CN2753-1
CN2753-2
CN2753-3
FRONT/REAR FAN SD CONTROL
<FROM TV MICROCONTROLLER (IC6004)>
OPT FAN SD CONTROL
<FROM TV MICROCONTROLLER (IC6004)>
MAIN P.C.B.
REAR JACK P.C.B.

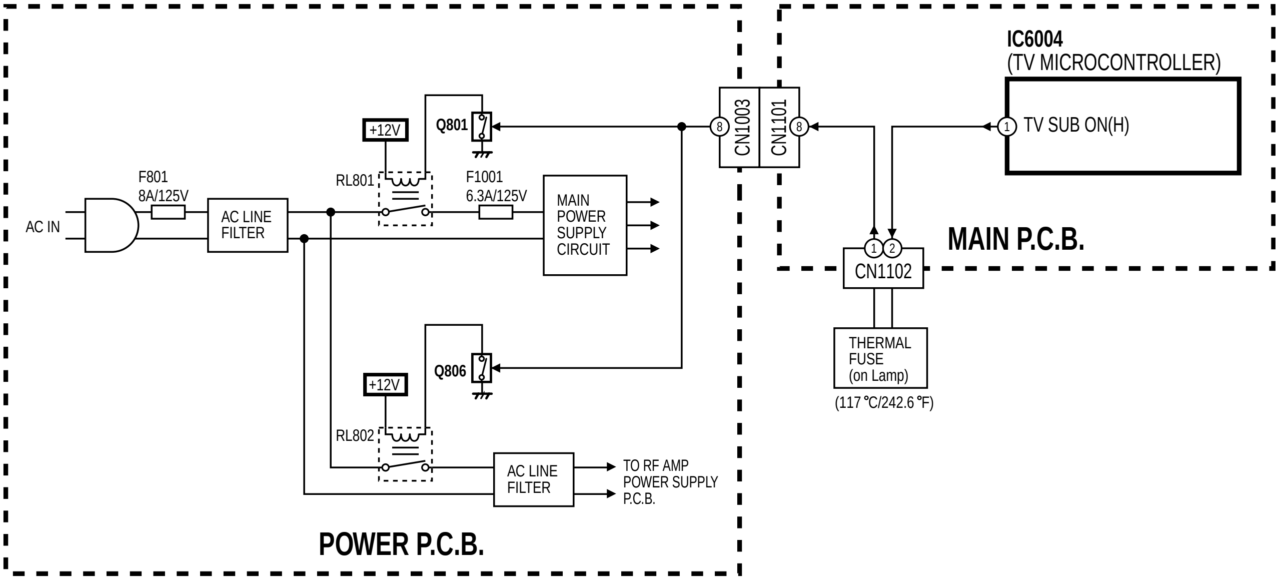
● AC stop detection circuit


T801
2
9
7
3
6
D802
FULL-WAVE RECTIFIER
STBY+7V
D811
Q803-Q805
AC VOLTAGE DETECT
6
CN1003
CN1101
6
Normal
SOS
IC6004
(TV MICROCONTROLLER)
12
AC STOP (L)
POWER P.C.B.
MAIN P.C.B.

● Over current detection circuit


IC1001 (SWITCHING CONTROL)
T1002
DRIVE CONTROL
9
14
SWITCHING TRANSFORMER
Over current detect
5
OVER CURRENT DETECT
POWER P.C.B.

● Abnormal Temperature (Thermal fuse) detection circuit


IC6004
(TV MICROCONTROLLER)
+12V
Q801
8
CN1003
CN1101
8
1
TV SUB ON(H)
F801
8A/125V
RL801
F1001
6.3A/125V
AC IN
AC LINE FILTER
MAIN POWER SUPPLY CIRCUIT
1
2
CN1102
MAIN P.C.B.
THERMAL FUSE (on Lamp)
(117 °C/242.6 °F)
Q806
+12V
RL802
AC LINE FILTER
TO RF AMP POWER SUPPLY P.C.B.
POWER P.C.B.

How to solve problems indicated by the Error Indication

(The symptom of all errors is that the Lamp goes off)

Note: Before performing troubleshooting, confirm that all connector cables in the unit are connected correctly.

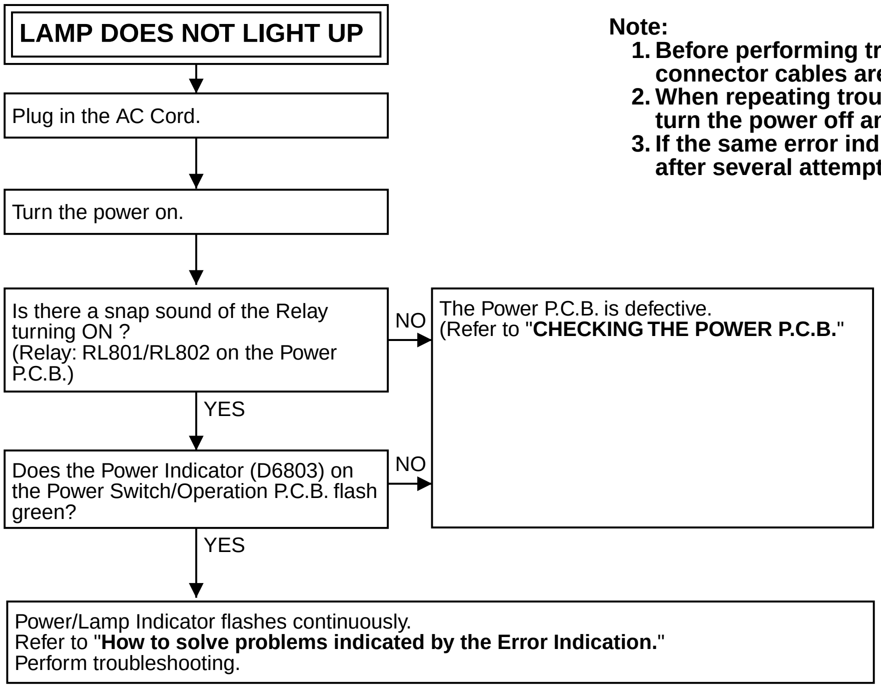
POWER Indicator	Problem	Possible Solution
1	**[POWER Indicator one blink]** The following voltage lines on the Main P.C.B. is over current. • SUB+5V line • SUB+1.8V line • SUB+3.3V line • SUB+1.2V line • FHD+3.3V line • DDR+3.3V line • FHD+1.2V line The following voltage lines on the Main P.C.B. is over voltage. • DT+9V line • SUB+5V line • SUB+1.8V line • SUB+3.3V line • SUB+1.2V line • FHD+3.3V line • DDR+3.3V line • FHD+1.2V line	1. Check the Power P.C.B. (Refer to **"CHECKING THE POWER P.C.B."**) 2. If still NG, check DC/DC circuit on the Main P.C.B. (Refer to **"CHECKING THE OPT/TV UNIT (Main P.C.B.)."**)
2	**[POWER Indicator two blinks]** DT+9V line error.	1. Check that Connector CN1102 (Thermal Fuse) on the Main P.C.B. is connected firmly. 2. If still NG, check the Power P.C.B. (Refer to **"CHECKING THE POWER P.C.B."**) 3. If still NG, check the following parts of DT+9V line on the Main P.C.B., and replace if necessary. • R6011, IC6004, and the surrounding parts.
3	**[POWER Indicator three blinks]** SUB+5V line error.	1. Check the following parts of the SUB+5V line on the Main P.C.B., and replace if necessary. • R6134, IC1107, IC6004, and the surrounding parts.
4	**[POWER Indicator four blinks]** MAIN+3.3V line error.	1. Check the following parts of the MAIN+3.3V line on the Main P.C.B., and replace if necessary. • R6106, IC1104, IC6004, Q1104-Q1106, and the surrounding parts.
6	**[POWER Indicator six blinks]** AUDIO AMP (IC4501) failure	1. Check the voltage at Pin 5 of IC4501 on the Main P.C.B. If +3.3V(High), replace IC4501. If 0V(Low), check the following parts of the SOUND SOS line between Pin 5 of IC4501 and Pin 72 of IC6004 on the Main P.C.B., and replace if necessary. • Q4502, IC6004, and the surrounding parts.
7	**[POWER Indicator seven blinks]** Communication error between Peaks (IC8001) and TV microcontroller (IC6004) on the Main P.C.B.	1. Check the following parts of the PANEL SOS(L) line between Pin L16 of IC8001 and Pin 48 of IC6004 on the Main P.C.B., and replace if necessary. • IC8001, IC6004, and the surrounding parts.
9	**[POWER Indicator nine blinks]** Communication error between Peaks (IC8001) and TV microcontroller (IC6004) on the Main P.C.B.	1. Check the following parts of the PANEL STATUS (SOS(L)) line between Pin G1 of IC8001 and Pin 13 of IC6004 on the Main P.C.B., and replace if necessary. • IC8001, IC6004, and the surrounding parts.

How to solve problems indicated by the Error Indication

(The symptom of all errors is that the Lamp goes off)

Note: Before performing the troubleshooting, confirm that all connector cables in the unit are connected correctly.

<table>
<tr><th>LAMP Indicator</th><th>Problem</th><th>Possible Solution</th></tr>
<tr><td>2</td><td>[LAMP Indicator two blinks]
Lamp does not light up.</td><td>1. Try to turn on the power several times. (Wait 5 minutes before retrying.)
2. If still NG, replace the Lamp Unit.</td></tr>
<tr><td>3</td><td>[LAMP Indicator three blinks]
Lamp failure (Internal Lamp thermistor open or short).</td><td>1. Try to turn on the power several times. (Wait 5 minutes before retrying.)
2. If still NG, replace the Lamp Unit.</td></tr>
<tr><td>4</td><td>[LAMP Indicator four blinks]
Abnormal Lamp temperature (more than 92 ˚C).</td><td>1. Relocate the unit to a proper location.
Keep the unit at least 100 mm (4") away from the wall to provide proper ventilation because warm air is discharged. Blocking the ventilation opening of the cooling fan may damage the unit.
2. Wait until the Lamp has cooled off (approximately 1 hour) and try to turn on the power several times.
3. If still NG, check whether the Fans rotate normally and Fan voltages, and repair if necessary.
<table>
<tr><th>Fan</th><th>Check Point</th><th>Voltage (Normal ~ High)</th></tr>
<tr><td>Lamp Fan</td><td>CN2753 (Pin 1) or TP2758</td><td>7.0 V</td></tr>
<tr><td>OPT Fan</td><td>CN2754 (Pin 1) or TP2757</td><td>6.0 V ~ 6.5 V</td></tr>
<tr><td>Front Fan</td><td>CN2751 (Pin 1) or TP2759</td><td>8.0 V</td></tr>
<tr><td>Rear Fan</td><td>CN2752 (Pin 1) or TP2759</td><td>8.0 V</td></tr>
</table>
4. If still NG, replace the Lamp Unit.</td></tr>
<tr><td>5</td><td>[LAMP Indicator five blinks]
Lamp communication error.</td><td>1. Try to turn on the power several times. (Wait 5 minutes before retrying.)
2.If still NG, check that the cable between CN6005 on the Main P.C.B. and the Lamp Unit is connected firmly.
3. If still NG, replace the Lamp Unit.
4. If still NG, check signal of the LAMP TXD, LAMP RXD line at Pin 1, 7 of CN6005 on the Main P.C.B. and check the following parts on the Main P.C.B., and replace if necessary.
• Q6017, Q6018, R6169, R6193 and the surrounding parts.</td></tr>
<tr><td>8</td><td>[LAMP Indicator eight blinks]
Cooling Fan (Lamp Fan) malfunction.</td><td>1. Check that Connector CN2753 on the Rear Jack P.C.B. is connected firmly.
2. If still NG, replace the Lamp Fan.
3. If still NG, check IC2754 and surrounding parts, and replace if necessary.</td></tr>
<tr><td>9</td><td>[LAMP Indicator nine blinks]
Cooling Fan (OPT Fan) malfunction.</td><td>1. Check that Connector CN2754 on the Rear Jack P.C.B. is connected firmly.
2. If still NG, replace the Fan Case Unit (OPT Fan).
3. If still NG, check IC2753 and surrounding parts on the Rear Jack P.C.B., and replace if necessary.</td></tr>
<tr><td>10</td><td>[LAMP Indicator ten blinks]
Cooling Fan (Front Fan or Rear Fan) malfunction.</td><td>1. Check that Connector CN2751 or CN2752 on the Rear Jack P.C.B. is connected firmly.
2. If still NG, check whether the Front Fan or Rear Fan stopped and replace it.
3. If still NG, check IC2751 and surrounding parts on the Rear Jack P.C.B., and replace if necessary.</td></tr>
<tr><td>11</td><td>[LAMP Indicator eleven blinks]
Cooling Fan (Rear Fan or Front Fan) malfunction.</td><td>1. Check that Connector CN2752 or CN2751 on the Rear Jack P.C.B. is connected firmly.
2. If still NG, check whether the Front Fan or Rear Fan stopped and replace it.
3. If still NG, check IC2751 and surrounding parts on the Rear Jack P.C.B., and replace if necessary.</td></tr>
<tr><td>12</td><td>[LAMP Indicator twelve blinks]
Rear Jack P.C.B. connection error.</td><td>1. Check that Connector CN3501 on the Rear Jack P.C.B. is connected into Connector CN3001 on the Main P.C.B. firmly.
2. If still NG, check the following parts at FAN SOS line between Pin 29 of CN3001 and Pin 117 of IC6004 on the Main P.C.B., and replace if necessary.
• R6025, IC6004, and the surrounding parts.</td></tr>
<tr><td>13</td><td>[LAMP Indicator thirteen blinks]
Abnormal Lamp input voltage (+26V)
Normal: +26V
Abnormal: less than +20V</td><td>1. Try to turn on the power several times. (Wait 5 minutes before retrying.)
2. If still NG, check that Connector CN1 and CN151 on the RF AMP Power Supply P.C.B. are connected firmly.
3. If still NG, unplug the AC Cord and disconnect CN151 connector cable and check the voltage at Pin 1,2 or 3 of CN151 on the RF AMP Power Supply P.C.B. See Figure a.
If OK (+26V), replace the Lamp Unit.
4. If NG, check the voltage between Pin 1 and Pin 2 of CN1 on the RF Amp Power Supply P.C.B.
If OK (AC120V), replace the RF Amp Power Supply P.C.B.
If NG, check the Power P.C.B.
(Refer to "CHECKING THE POWER P.C.B.")</td></tr>
</table>



LAMP DOES NOT LIGHT UP

Plug in the AC Cord.

Turn the power on.

Is there a snap sound of the Relay turning ON ? (Relay: RL801/RL802 on the Power P.C.B.)

Does the Power Indicator (D6803) on the Power Switch/Operation P.C.B. flash green?

The Power P.C.B. is defective.
(Refer to "**CHECKING THE POWER P.C.B.**"

Power/Lamp Indicator flashes continuously.
Refer to "**How to solve problems indicated by the Error Indication.**"
Perform troubleshooting.

Note:

1. **Before performing troubleshooting, confirm that all connector cables are connected properly.**
2. **When repeating troubleshooting, be sure to turn the power off and unplug the AC Cord.**
3. **If the same error indication repeatedly occurs after several attempts, proceed to the next step.**

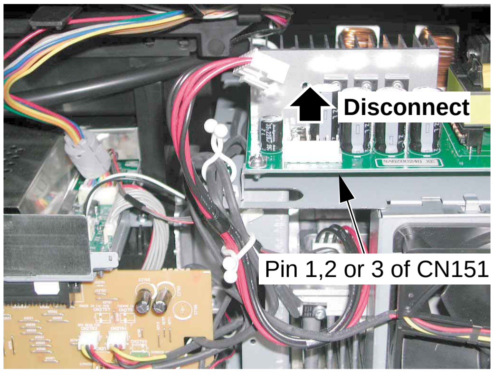


Figure. a

CHECKING THE POWER P.C.B.

Disconnect all Power P.C.B. connector cables, then remove Power P.C.B. from the unit.

Refer to Power P.C.B. Service Position, Figure 1.

Check the following parts on the Power P.C.B. with the tester.

D802, D807, D808, D811, D814,
D1001, D1002, D1003, D1004, D1006, D1007, D1008, D1009, D1010, D1011, D1012, D1016, D1017,
F801, F1001, IC1001 (Between Pin9 and Pin5), IC1002, IC1003,
PR1001, Q803, Q804, Q805, Q1001,
R806, R1006, R1009, R1011, R1022, R1026,

OK

NG

Replace any defective parts.

Solder a jumper wire between TP810 and TP805 on the Power P.C.B.

Plug in the AC Cord.

Is there a snap sound of the Relay turning ON?
(Relay: RL801, RL802 on the Power P.C.B.)

NO

Check the following parts on the Power P.C.B. with the tester.

D802, D807, D809, D852,
Q801, Q806,
R807, R808, R826, R827,
RL801, RL802, T801

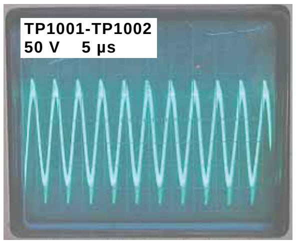
Replace any defective parts.

Check the other parts on the Power P.C.B. and replace any defective parts.

OK

Check the waveform between TP1001 and TP1002
(or between Pin 9 of IC1001 and HOT GND) on the Power P.C.B.

NG



OK

Check the voltage at the following points. (Use Pin 12 of CN1003 as GND.)

- CN1003 (Pin 5): approx. +9.5 V [STBY_7V]
- CN1003 (Pin 7): approx. +30 V [REG_30V]
- CN1003 (Pin 10): approx. +9 V [REG_9V]
- CN1003 (Pin 1): approx. +18 V [AUDIO_18V]

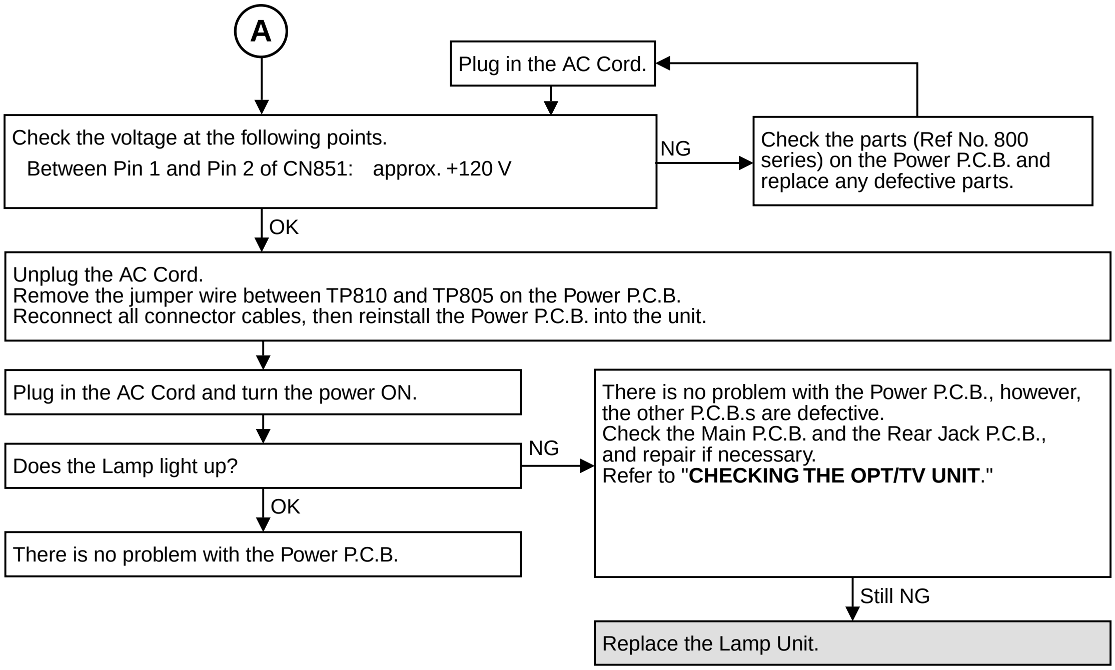
OK

NG

Check the other parts on the power P.C.B. and replace any defective parts.

Plug in the AC Cord.

A



Plug in the AC Cord.

Check the voltage at the following points.
Between Pin 1 and Pin 2 of CN851: approx. +120 V

Check the parts (Ref No. 800 series) on the Power P.C.B. and replace any defective parts.

Unplug the AC Cord.
Remove the jumper wire between TP810 and TP805 on the Power P.C.B.
Reconnect all connector cables, then reinstall the Power P.C.B. into the unit.

Plug in the AC Cord and turn the power ON.

Does the Lamp light up?

There is no problem with the Power P.C.B.

There is no problem with the Power P.C.B., however, the other P.C.B.s are defective.
Check the Main P.C.B. and the Rear Jack P.C.B., and repair if necessary.
Refer to "**CHECKING THE OPT/TV UNIT**."

Replace the Lamp Unit.

Power P.C.B. Service Position

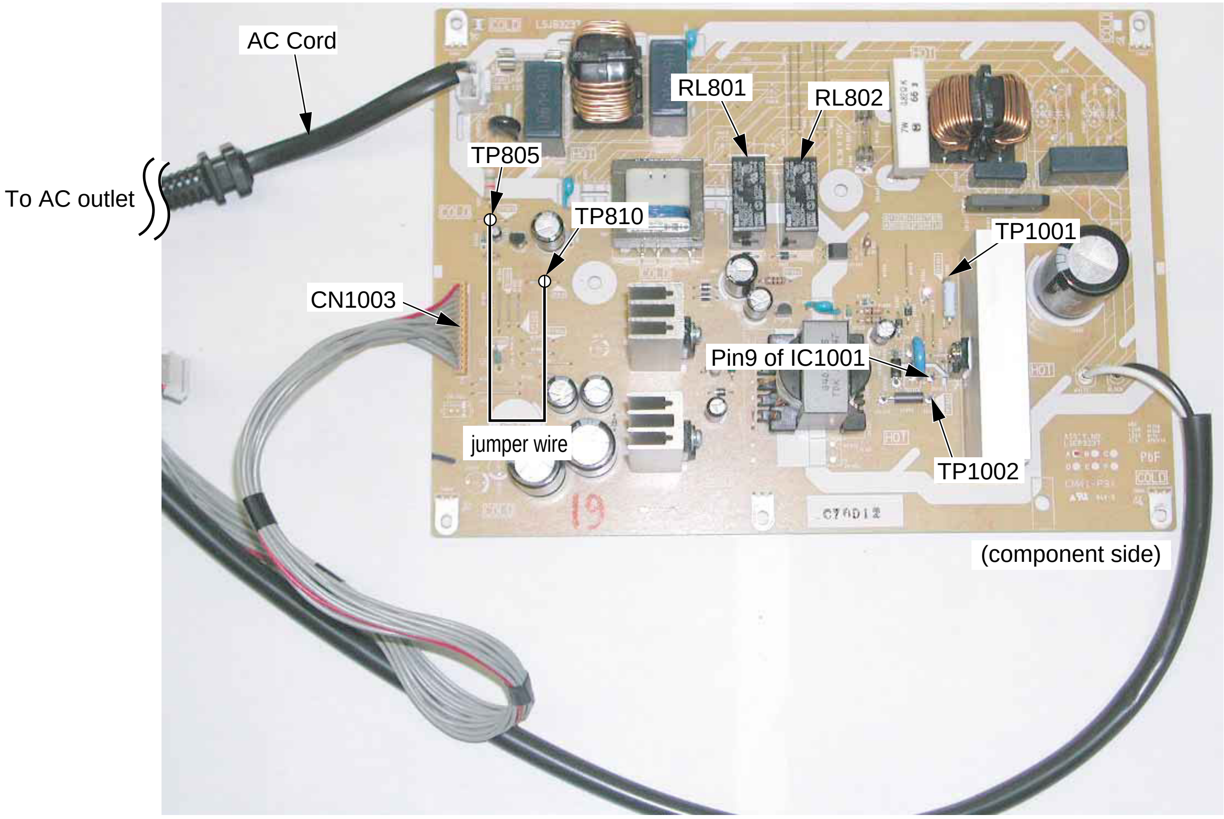
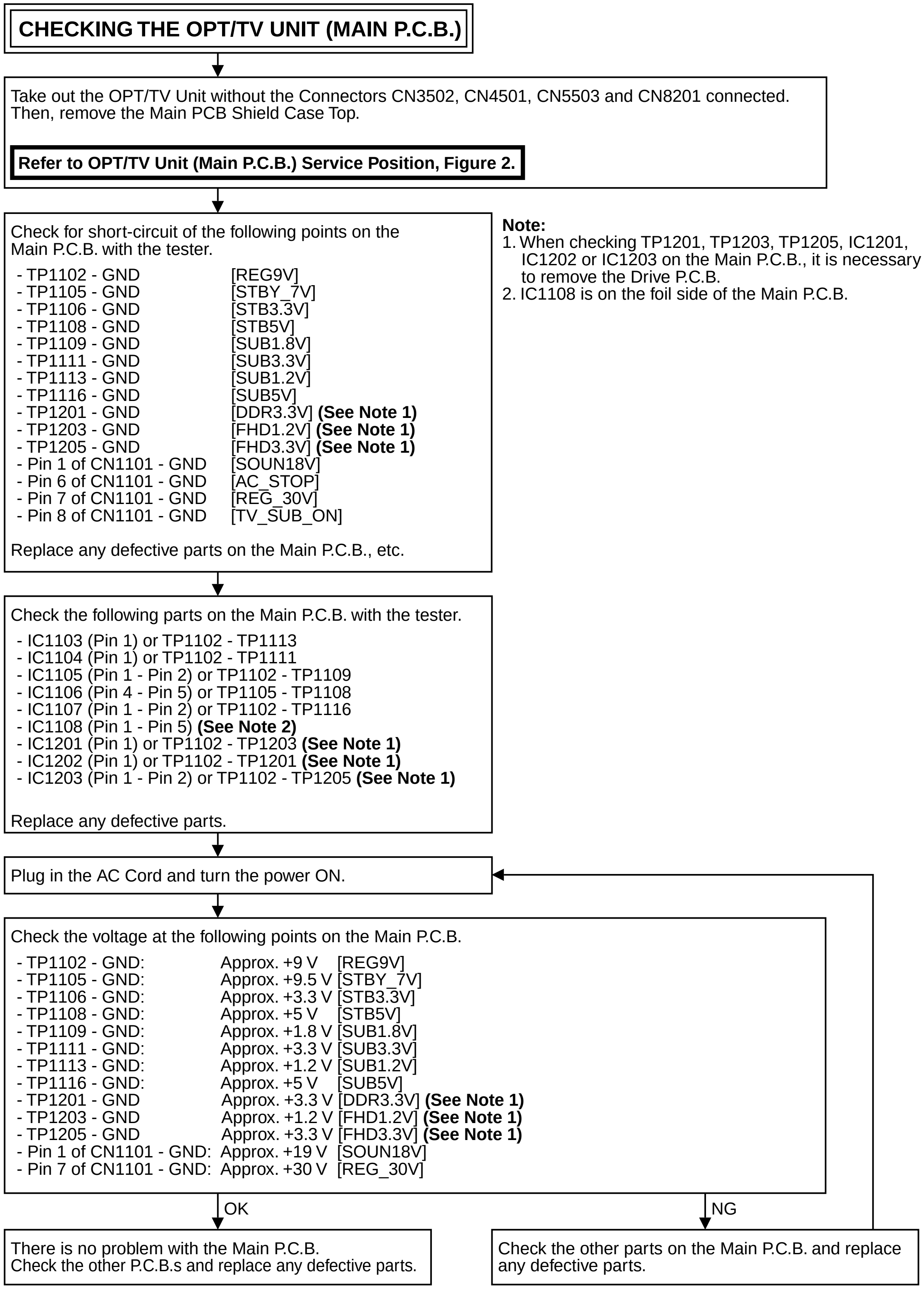

AC Cord
To AC outlet
RL801
RL802
TP805
TP810
TP1001
CN1003
Pin9 of IC1001
jumper wire
TP1002
(component side)

Figure 1

CHECKING THE OPT/TV UNIT (MAIN P.C.B.)



Take out the OPT/TV Unit without the Connectors CN3502, CN4501, CN5503 and CN8201 connected.
Then, remove the Main PCB Shield Case Top.

Refer to OPT/TV Unit (Main P.C.B.) Service Position, Figure 2.

Check for short-circuit of the following points on the Main P.C.B. with the tester.

- TP1102 - GND [REG9V]
- TP1105 - GND [STBY_7V]
- TP1106 - GND [STB3.3V]
- TP1108 - GND [STB5V]
- TP1109 - GND [SUB1.8V]
- TP1111 - GND [SUB3.3V]
- TP1113 - GND [SUB1.2V]
- TP1116 - GND [SUB5V]
- TP1201 - GND [DDR3.3V] **(See Note 1)**
- TP1203 - GND [FHD1.2V] **(See Note 1)**
- TP1205 - GND [FHD3.3V] **(See Note 1)**
- Pin 1 of CN1101 - GND [SOUN18V]
- Pin 6 of CN1101 - GND [AC_STOP]
- Pin 7 of CN1101 - GND [REG_30V]
- Pin 8 of CN1101 - GND [TV_SUB_ON]

Replace any defective parts on the Main P.C.B., etc.

Note:
1. When checking TP1201, TP1203, TP1205, IC1201, IC1202 or IC1203 on the Main P.C.B., it is necessary to remove the Drive P.C.B.
2. IC1108 is on the foil side of the Main P.C.B.

Check the following parts on the Main P.C.B. with the tester.

- IC1103 (Pin 1) or TP1102 - TP1113
- IC1104 (Pin 1) or TP1102 - TP1111
- IC1105 (Pin 1 - Pin 2) or TP1102 - TP1109
- IC1106 (Pin 4 - Pin 5) or TP1105 - TP1108
- IC1107 (Pin 1 - Pin 2) or TP1102 - TP1116
- IC1108 (Pin 1 - Pin 5) **(See Note 2)**
- IC1201 (Pin 1) or TP1102 - TP1203 **(See Note 1)**
- IC1202 (Pin 1) or TP1102 - TP1201 **(See Note 1)**
- IC1203 (Pin 1 - Pin 2) or TP1102 - TP1205 **(See Note 1)**

Replace any defective parts.

Plug in the AC Cord and turn the power ON.

Check the voltage at the following points on the Main P.C.B.

- TP1102 - GND: Approx. +9 V [REG9V]
- TP1105 - GND: Approx. +9.5 V [STBY_7V]
- TP1106 - GND: Approx. +3.3 V [STB3.3V]
- TP1108 - GND: Approx. +5 V [STB5V]
- TP1109 - GND: Approx. +1.8 V [SUB1.8V]
- TP1111 - GND: Approx. +3.3 V [SUB3.3V]
- TP1113 - GND: Approx. +1.2 V [SUB1.2V]
- TP1116 - GND: Approx. +5 V [SUB5V]
- TP1201 - GND Approx. +3.3 V [DDR3.3V] **(See Note 1)**
- TP1203 - GND Approx. +1.2 V [FHD1.2V] **(See Note 1)**
- TP1205 - GND Approx. +3.3 V [FHD3.3V] **(See Note 1)**
- Pin 1 of CN1101 - GND: Approx. +19 V [SOUN18V]
- Pin 7 of CN1101 - GND: Approx. +30 V [REG_30V]

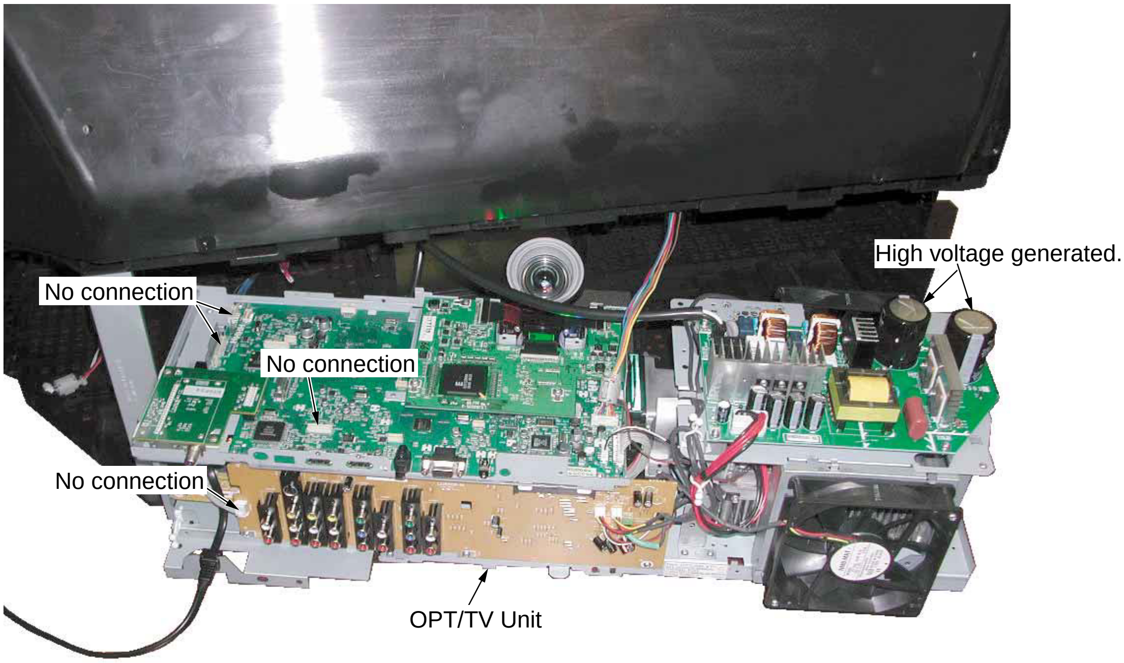
OK

There is no problem with the Main P.C.B.
Check the other P.C.B.s and replace any defective parts.

NG

Check the other parts on the Main P.C.B. and replace any defective parts.

OPT/TV Unit (Main P.C.B.) Service Position


No connection
No connection
No connection
High voltage generated.
OPT/TV Unit

Test Points for checking the voltage on the Main P.C.B.

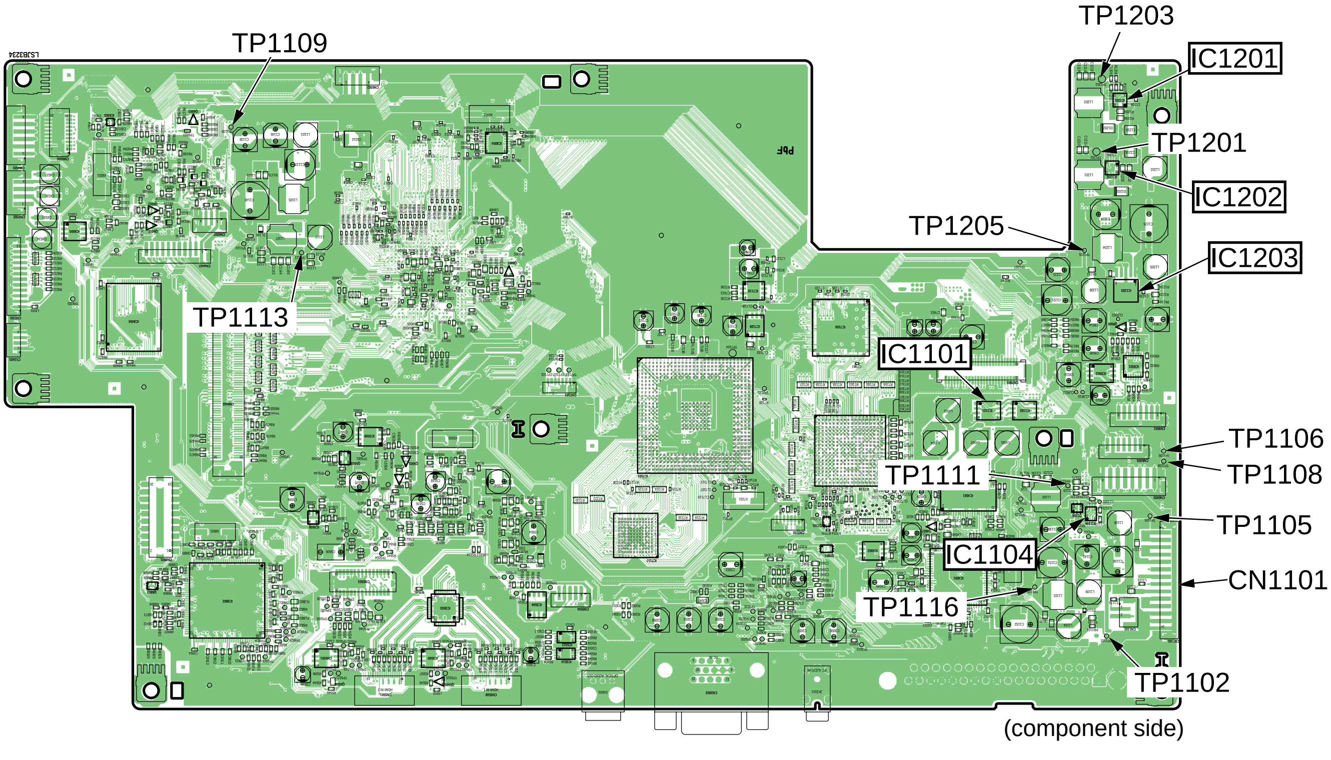

TP1203
TP1109
IC1201
TP1201
IC1202
TP1205
IC1203
TP1113
IC1101
TP1106
TP1108
TP1111
TP1105
IC1104
CN1101
TP1116
TP1102
(component side)

Figure 2

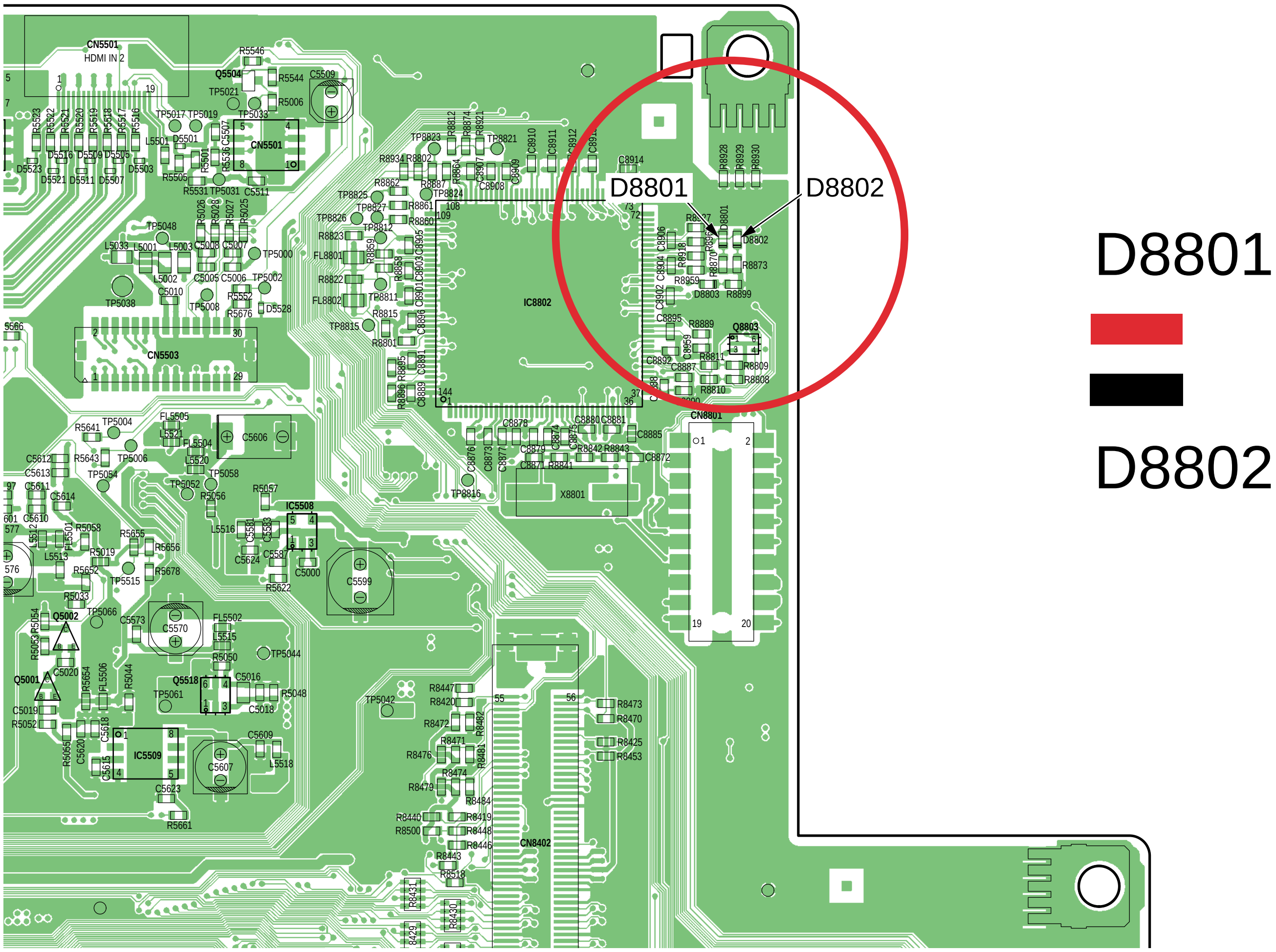
LED on the Main P.C.B. for Digital CH

- D8801: Sync Lock LED

(When Sync of Digital packet (MPEG2) is locked by IC8802, it lights up in RED)

- D8802: Error LED

(When MPEG data has many errors (Block noise in screen), it flickers in RED. In normal condition, it is off)


D8801
D8802
IC8802
CN8801
CN5501
HDMI IN 2
CN5503
X8801
CN8402
D8801
🟥
⬛
D8802

<Normal condition>

D8801 RED/D8802 OFF
Circuit from Tuner through IC8802 (Front End) is working good.

<Error condition>

D8801 OFF/D8802 OFF
Possibility: Tuner or IC8802 (Demodulator) is not working.

1. Check solder first.

D8801 ON/D8802 flickers RED
Possibility: AGC is not working. (IC8801 or Tuner)

1. Check solder first.

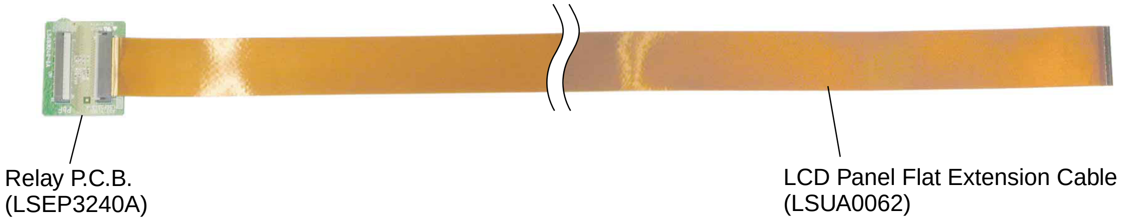
Note:
If received signal level is too low, D8801 goes off.

4 Service Fixture & Tools

4.1. Service Fixture and Tools

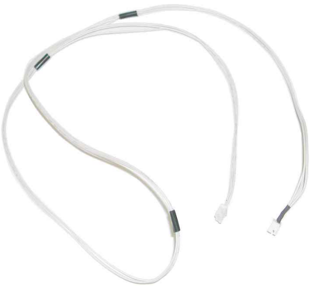
LSEP3240A
LSUA0062

Relay PCB (LCD Panel)
LCD Panel Flat Extension Cable



Note:
3 of each are required for servicing.

LSUA0039 **Fan Extension Cable**



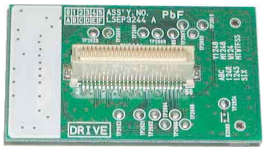
Note:
4 of each are required for servicing.

LSUA0063 **7 Pin Extension Cable**

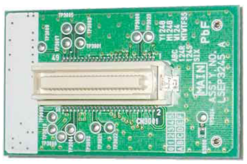
LSUA0065 **Thermal Fuse Defeat Cable**

LSUA0067 **4 Pin Extension Cable**

LSEP3244A **Relay PCB (Drive side)**



LSEP3245A **Relay PCB (Main side)**



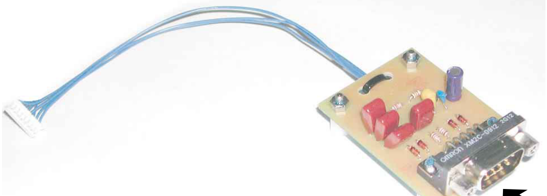
LSJA0582 **12 Pin Extension Cable**

Note:
The cable which was included in the 2006 DLP model (PT-56/61DLX76/61DLX26) can be used for Ref No. 216.

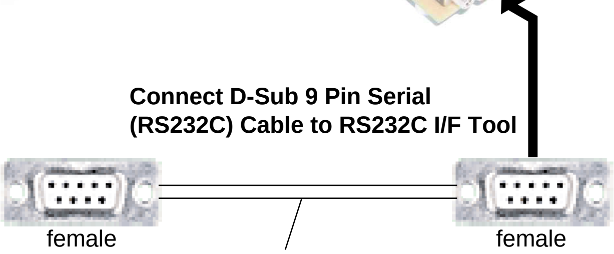
K1PY31Y00003 **LVDS Cable**

Note:
The cable which was included in the 2006 DLP model (PT-56/61DLX76/61DLX26) can be used for Ref No. 14.

LSUA0043 **RS232C I/F Tool**



Connect D-Sub 9 Pin Serial (RS232C) Cable to RS232C I/F Tool


female
female

D-Sub 9 Pin Serial (RS232C) Cable: Purchase locally

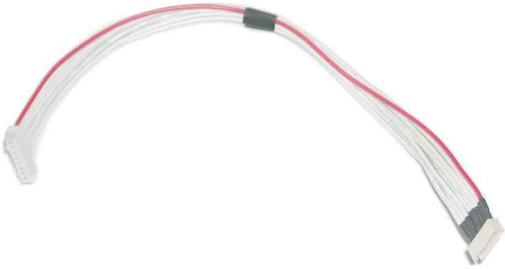
RS232C Connecting tool

(For 2002 models (PT-40/45LC12))

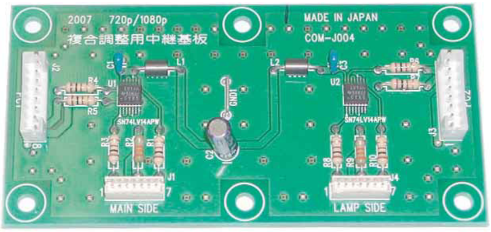
Note:
RS232C Connecting tool which was included in the 2002 model checker as shown above can be used for both RS232C I/F Tool (LSUA0043) and D-Sub 9 Pin Serial (RS232C) Cable.

LSUA0064 **7 Pin Extension Cable**

LSUA0068 **8 Pin Extension Cable**



LSUA0069 **Relay PCB (Adjustment)**


2007 720p/1080p
複合調整用中継基板
MADE IN JAPAN
COM-J004
MAIN SIDE
LAMP SIDE

4.2. Service Position

MAIN P.C.B. CHECK (1)

It is possible to check the component side of the Main P.C.B./Drive P.C.B.

The following original parts are not installed:
Rear Jack Holder
Top Duct Unit
Main PCB Shield Case Top

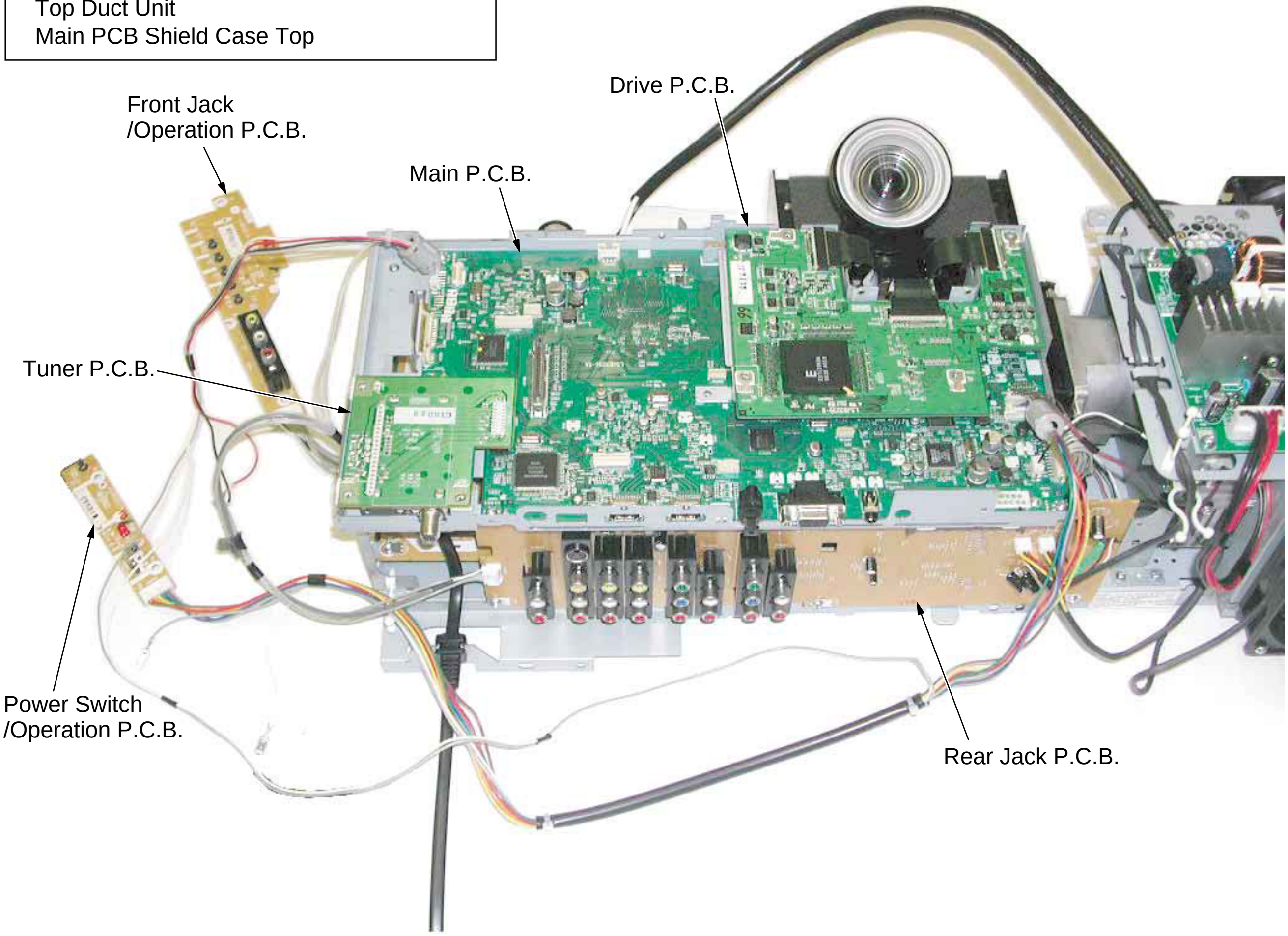

Front Jack
/Operation P.C.B.
Drive P.C.B.
Main P.C.B.
Tuner P.C.B.
Power Switch
/Operation P.C.B.
Rear Jack P.C.B.

Fig. S1-1

MAIN P.C.B. CHECK (2)

It is possible to check the foil side of the Main P.C.B./Drive P.C.B.

The following original parts are not installed:
- Rear Jack Holder
- Top Duct Unit
- Main PCB Shield Case Top

For more details, See Fig. S2-1, S2-2

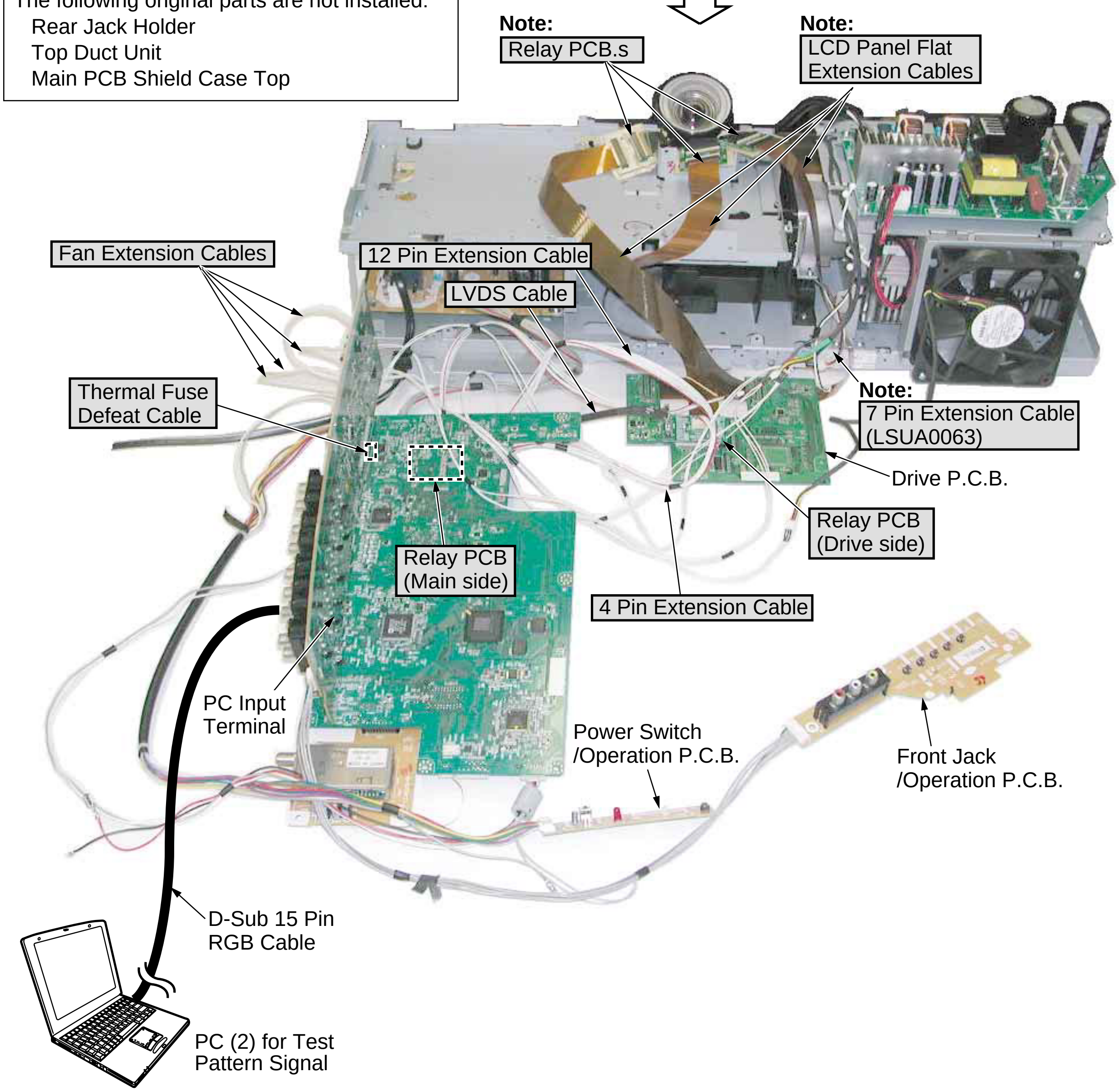

Note:
Relay PCB.s
Note:
LCD Panel Flat Extension Cables
Fan Extension Cables
12 Pin Extension Cable
LVDS Cable
Thermal Fuse Defeat Cable
Note:
7 Pin Extension Cable (LSUA0063)
Drive P.C.B.
Relay PCB (Drive side)
Relay PCB (Main side)
4 Pin Extension Cable
PC Input Terminal
Power Switch /Operation P.C.B.
Front Jack /Operation P.C.B.
D-Sub 15 Pin RGB Cable
PC (2) for Test Pattern Signal

Fig. S1-2

MAIN P.C.B. CHECK (3)

It is possible to check the component side of the Main P.C.B./Drive P.C.B.

Note:
Connections are the same as Fig. S2-2.

The following original parts are not installed:
- Rear Jack Holder
- Top Duct Unit
- Main PCB Shield Case Top

For more details, See Fig. S2-1, S2-2

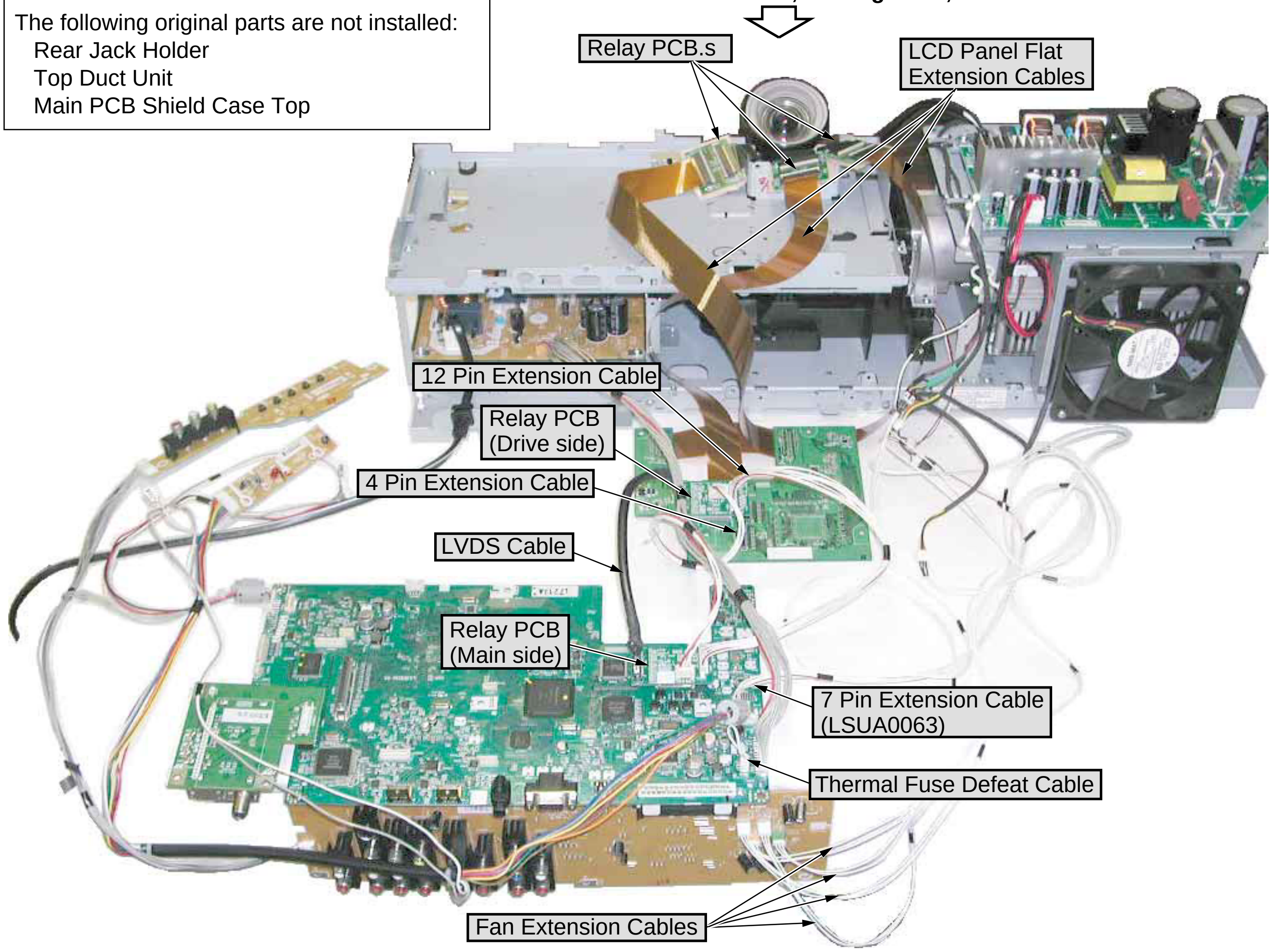

Relay PCB.s
LCD Panel Flat Extension Cables
12 Pin Extension Cable
Relay PCB (Drive side)
4 Pin Extension Cable
LVDS Cable
Relay PCB (Main side)
7 Pin Extension Cable (LSUA0063)
Thermal Fuse Defeat Cable
Fan Extension Cables

Fig. S1-3

MAIN P.C.B. CHECK (4)

It is possible to perform the Polarizer adjustment.

Note:
Connections are the same as Fig. S2-3.

The following original parts are not installed:
- Rear Jack Holder
- Top Duct Unit
- Main PCB Shield Case Top
- Main PCB Shield Case Bottom

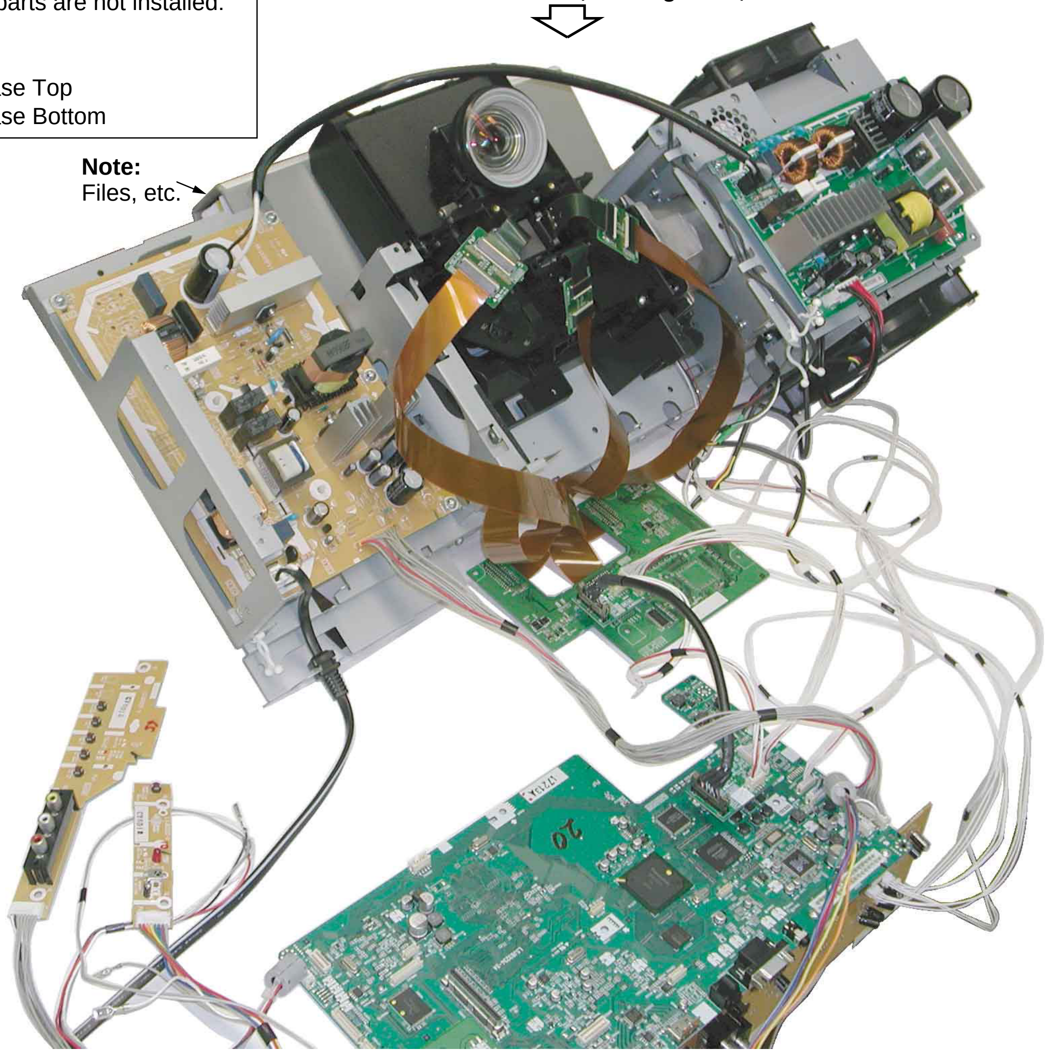
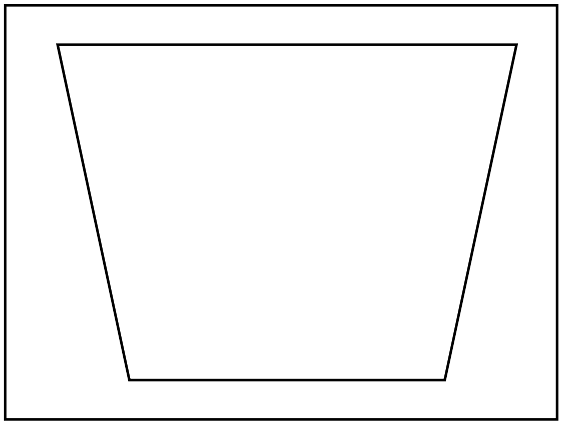

For more details, See Fig. S2-1, S2-2
Note:
Files, etc.

Fig. S1-4

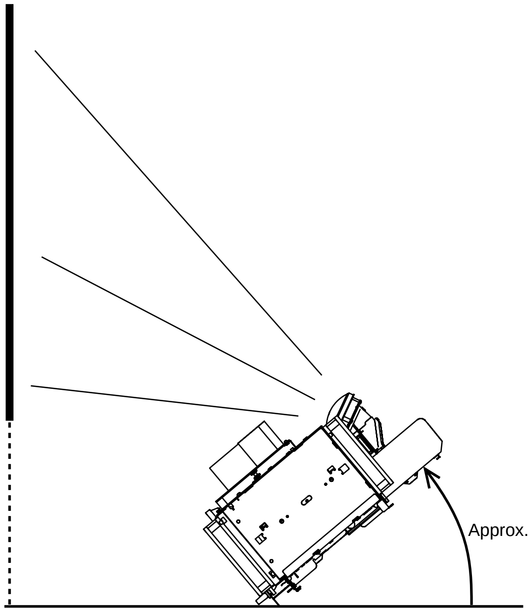
Note for Service Position:

1. The optical parts will be exposed to the dust in the air when the Top Duct Unit is removed.
   It is strongly recommend that it should be done in a clean room.
2. When picture is not outputting, it is necessary to connect LCD Panel Flat Extension Cables (LSUA0062), Relay PCBs (LSEP3240A) and 7 Pin Extension Cable (LSUA0063).
3. When checking the Main P.C.B. under the Drive P.C.B., remove the Drive P.C.B.
4. When changing the input mode, point the remote at IR receiver on the Front Jack/Operation P.C.B.
5. When performing Polarizer adjustment, project the picture onto the white screen so that the picture is within the limits of the Screen as shown.

Mechanical Adjustment Setting



<White Screen>

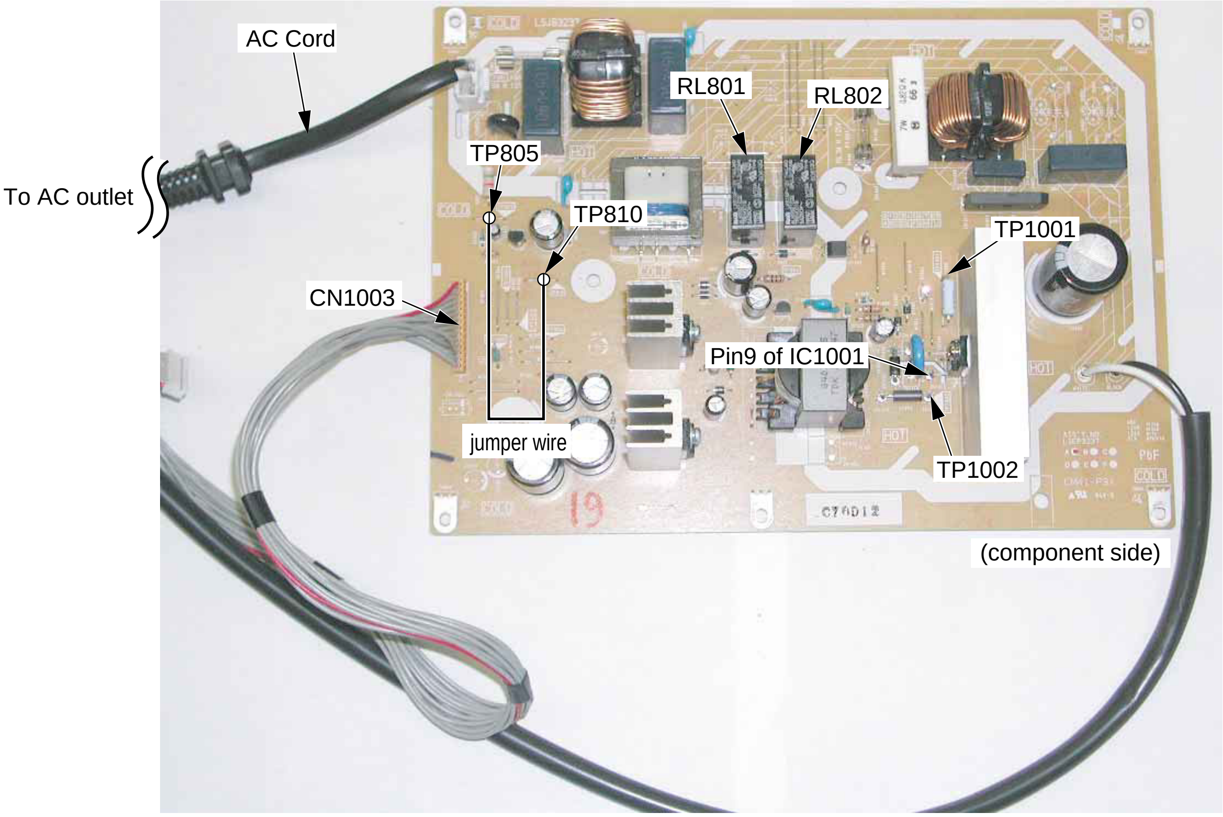


<Side View>

POWER P.C.B. CHECK

It is possible to check the Power P.C.B. only with no load.

Power P.C.B. Service Position


AC Cord
To AC outlet
RL801
RL802
TP805
TP810
TP1001
CN1003
Pin9 of IC1001
jumper wire
TP1002
(component side)

Refer to "CHECKING THE POWER P.C.B." in "Troubleshooting Hints for Component Level Repair."

Note:
To turn on, solder a jumper between TP810 and TP805. Then, plug in AC Cord (snap sound).

Detailed View for Service Position

Note:
Take care not to apply excessive pressure to the LCD Panel FPC when servicing.

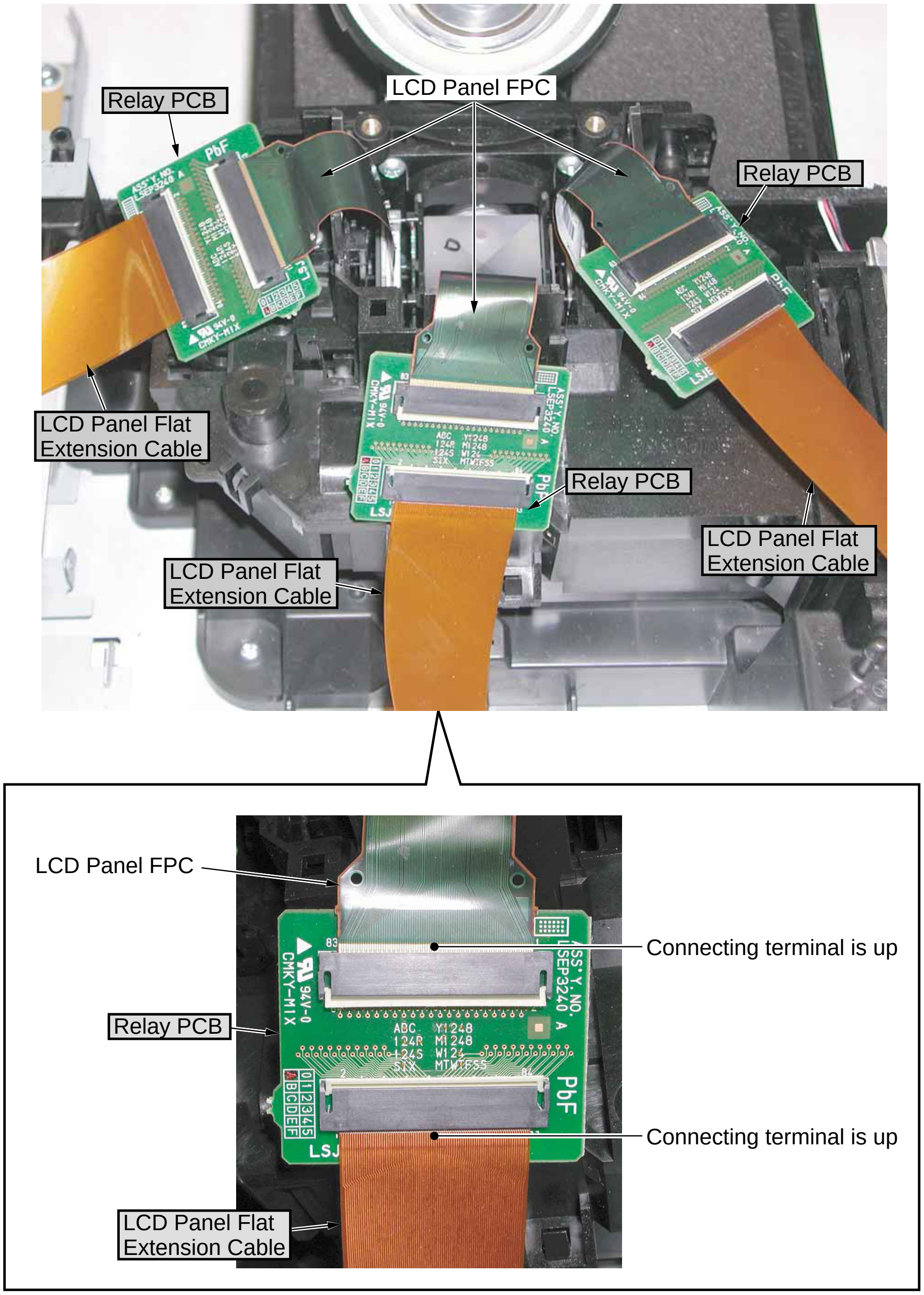

Relay PCB
LCD Panel FPC
Relay PCB
LCD Panel Flat Extension Cable
Relay PCB
LCD Panel Flat Extension Cable
LCD Panel Flat Extension Cable
LCD Panel FPC
Connecting terminal is up
Relay PCB
Connecting terminal is up
LCD Panel Flat Extension Cable

Fig. S2-1

Detailed View for Service Position

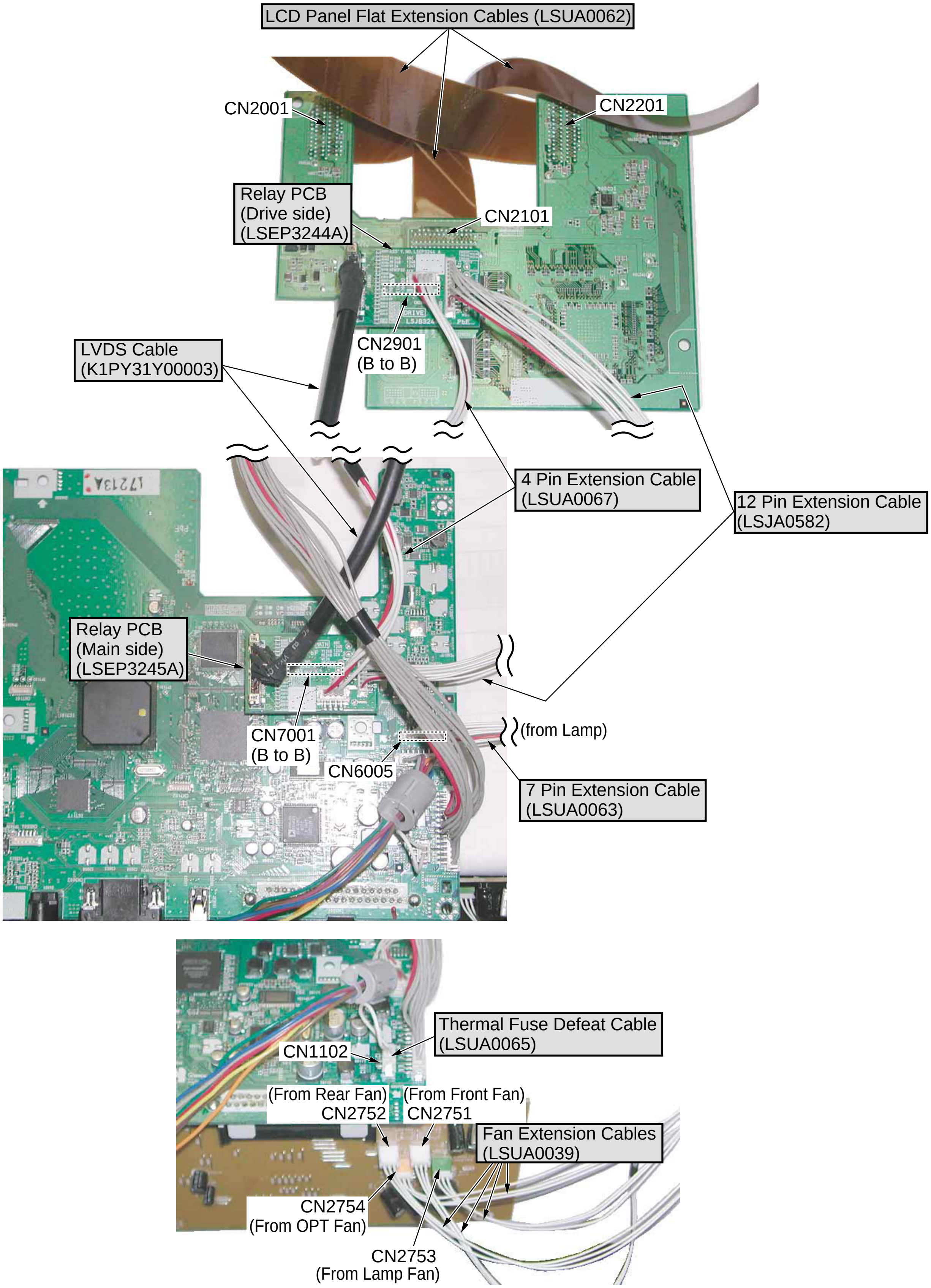

LCD Panel Flat Extension Cables (LSUA0062)
CN2001
CN2201
Relay PCB (Drive side) (LSEP3244A)
CN2101
CN2901 (B to B)
LVDS Cable (K1PY31Y00003)
4 Pin Extension Cable (LSUA0067)
12 Pin Extension Cable (LSJA0582)
Relay PCB (Main side) (LSEP3245A)
CN7001 (B to B)
CN6005
(from Lamp)
7 Pin Extension Cable (LSUA0063)
Thermal Fuse Defeat Cable (LSUA0065)
CN1102
(From Rear Fan) CN2752
(From Front Fan) CN2751
Fan Extension Cables (LSUA0039)
CN2754 (From OPT Fan)
CN2753 (From Lamp Fan)

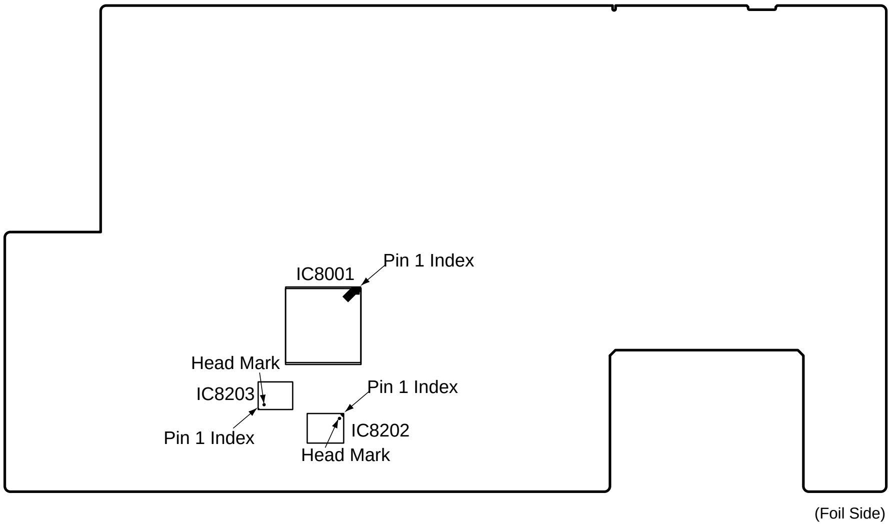
Fig. S2-2

4.3. Replacement Procedures for CSP (Chip Size Package) IC

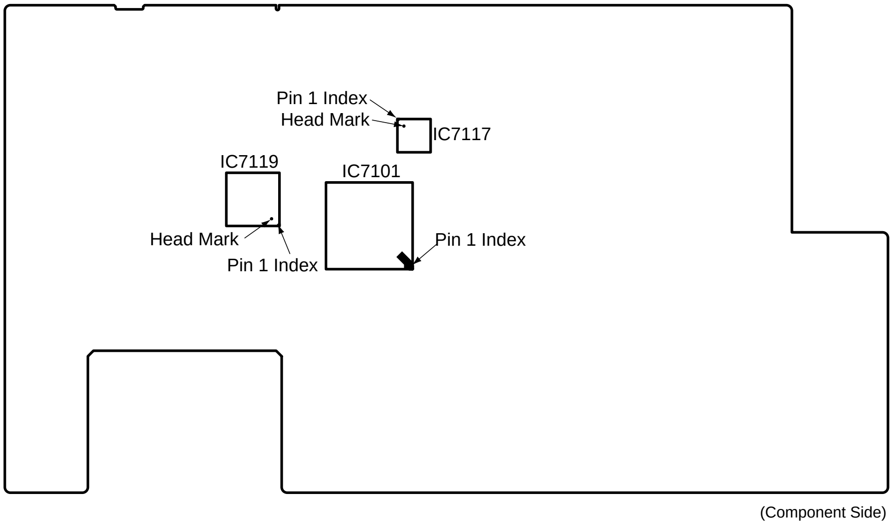
IC Location

Make sure to install IC in the correct position on the P.C.B. as shown.

Main P.C.B.

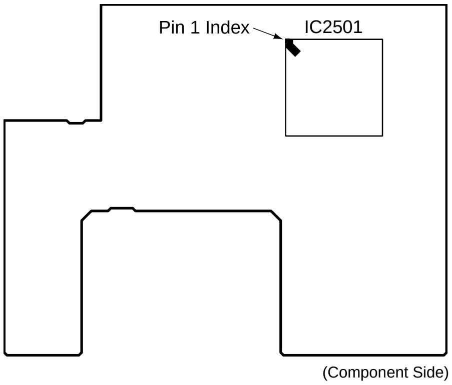


IC8001
Pin 1 Index
Head Mark
IC8203
Pin 1 Index
Pin 1 Index
IC8202
Head Mark
(Foil Side)



Pin 1 Index
Head Mark
IC7117
IC7119
IC7101
Head Mark
Pin 1 Index
Pin 1 Index
(Component Side)

Drive P.C.B.

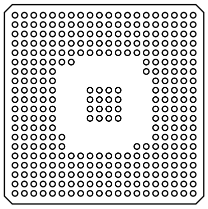


Pin 1 Index
IC2501
(Component Side)

Fig. 10-1

Temperature Profile for Heat Resistance of CSP IC

- IC2501 (CSP IC) on the Drive P.C.B.



<Bottom View of IC2501>

TEMPERATURE PROFILE FOR HEAT RESISTANCEOF THIS IC

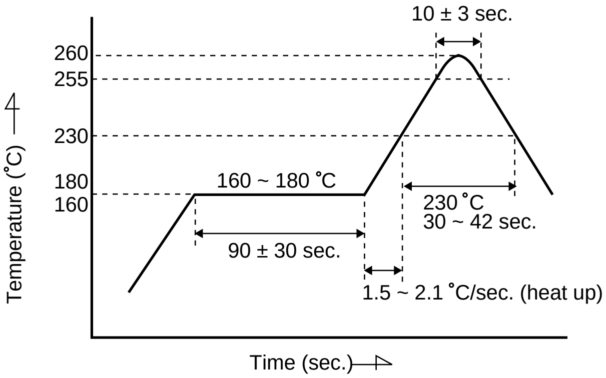
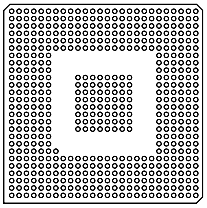


Fig. 10-2

- IC8001 (CSP IC) on the Main P.C.B.



<Bottom View>

TEMPERATURE PROFILE FOR HEAT RESISTANCE OF THIS IC

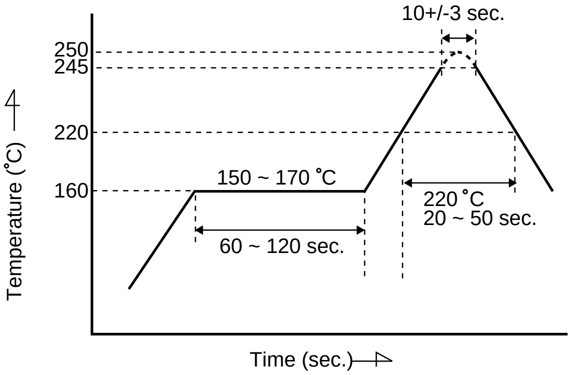
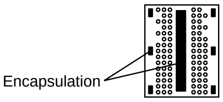


Fig. 10-3

- IC8202/IC8203 on the Main P.C.B.



<Bottom View>

TEMPERATURE PROFILE FOR HEAT RESISTANCEOF THIS IC

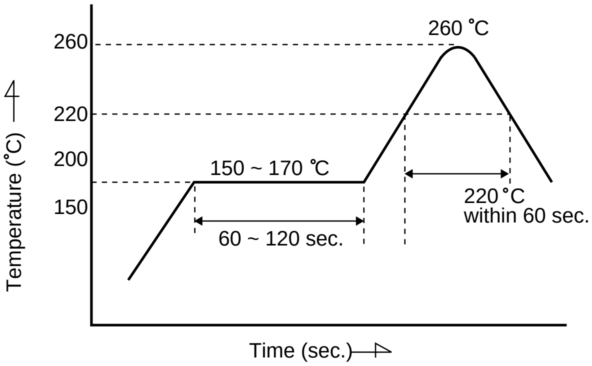
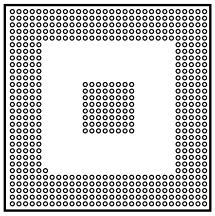


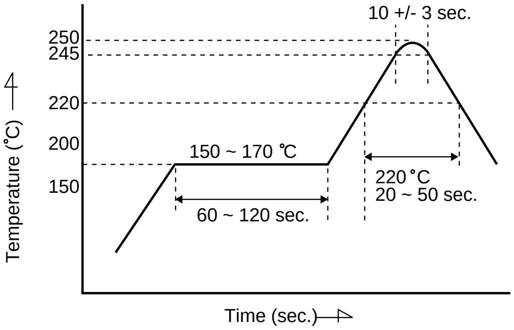
Fig. 10-4

- IC7101 (CSP IC) on the Main P.C.B.

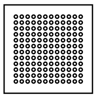


<Bottom View>

TEMPERATURE PROFILE FOR HEAT RESISTANCEOF THIS IC

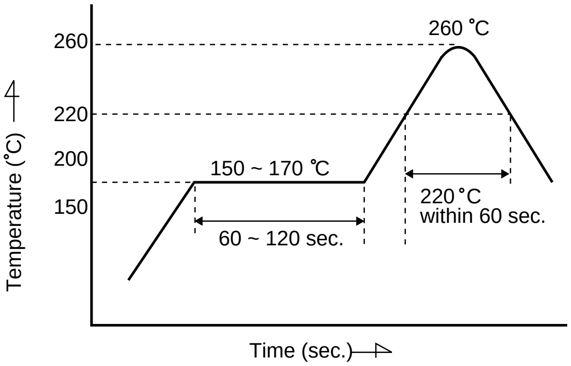


- IC7117 (CSP IC) on the Main P.C.B.

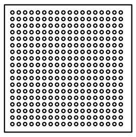


<Bottom View>

TEMPERATURE PROFILE FOR HEAT RESISTANCEOF THIS IC

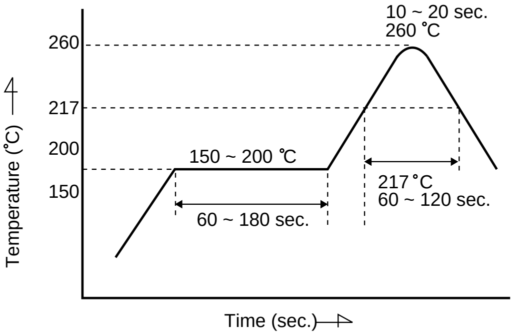


- IC7119 (CSP IC) on the Main P.C.B.



<Bottom View>

TEMPERATURE PROFILE FOR HEAT RESISTANCEOF THIS IC



5 Disassembly and Assembly Instructions

5.1. Optical Section

DISASSEMBLY METHOD FOR OPTICAL UNIT

When reassembling, perform the steps in reverse order. Bend, route and dress the wires as they were originally.

Note :

a. Place a cloth or some other soft material under the P.C. Boards or Unit to prevent damage.
b. When reinstalling, ensure that the connectors are connected firmly and electrical components have not been damaged.
c. Do not supply power to the unit during disassembly and reassembly.

Note:
The optical parts will be exposed to the dust in the air when the Top Duct Unit is removed. Therefore, it is strongly recommend to remove the Top Duct Unit only in a clean room.

REMOVAL OF THE MAIN P.C.B. AND THE DRIVE P.C.B. FROM THE OPT/TV UNIT

1. Remove the Tuner P.C.B. and the Rear Jack P.C.B. Refer to Steps 1~3 in "REMOVAL OF THE TUNER P.C.B., THE REAR JACK P.C.B. AND THE POWER P.C.B." in the service manual (Vol.1).
2. Remove the Top Duct Unit by removing the 2 screws.
3. 1) Disconnect Connectors CN1101, CN1102, CN6005 and release from the clamper.
   2) Open and remove the Main PCB Shield Case Top by removing the 3 screws.

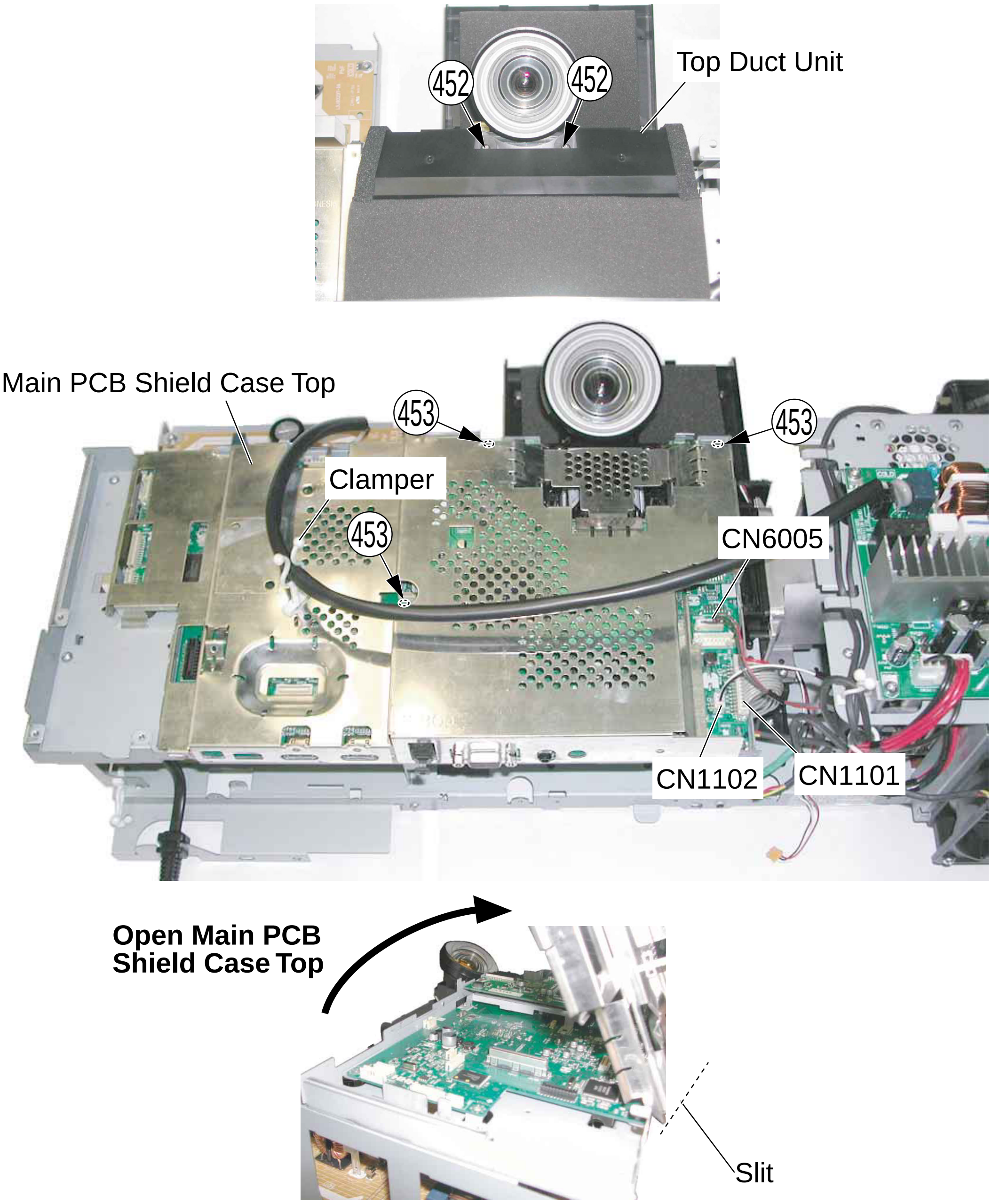
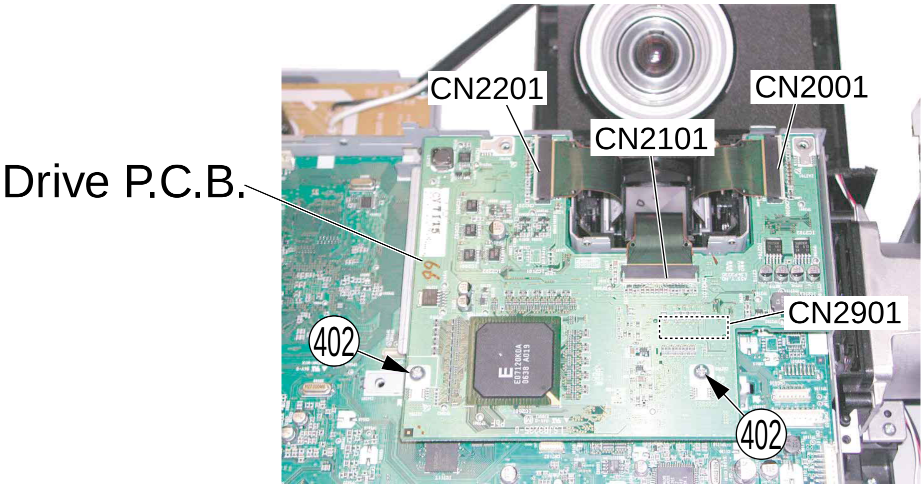


Fig. P1-1

4. 1) Disconnect Connectors CN2001, CN2101, CN2201 (LCD Flexible Flat Cable).
   2) Remove the Drive P.C.B. by removing the 2 screws. (CN2901 is disconnected.)
5. 1) Remove the Drive Support Metal Plate by removing the 2 screws.
   2) Remove the Main P.C.B. by removing the 5 screws.


CN2201
CN2001
CN2101
Drive P.C.B.
CN2901
402
402

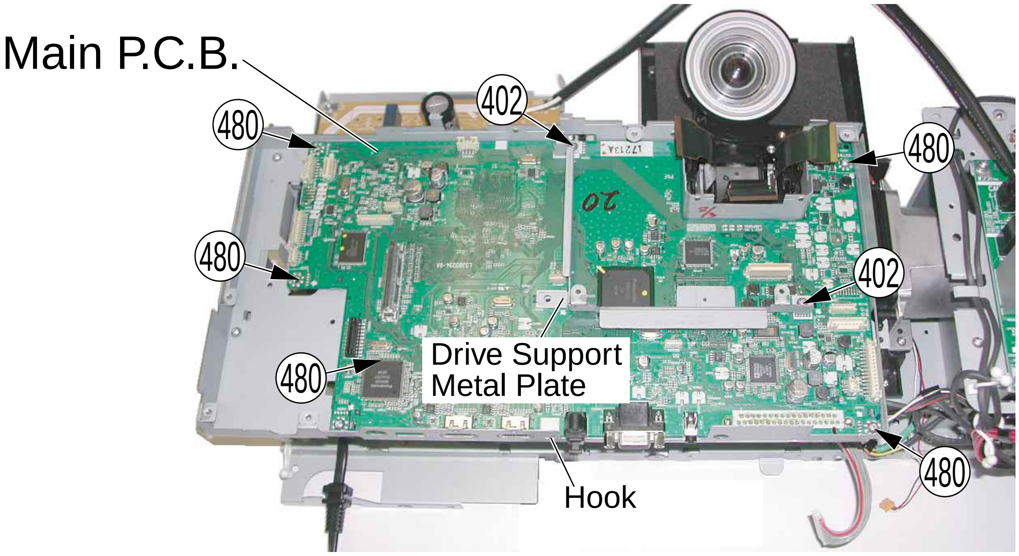

Main P.C.B.
402
480
480
480
480
402
480
Drive Support Metal Plate
Hook

Fig. P1-2

6. Remove the Main PCB Shield Case Bottom by removing the screws.

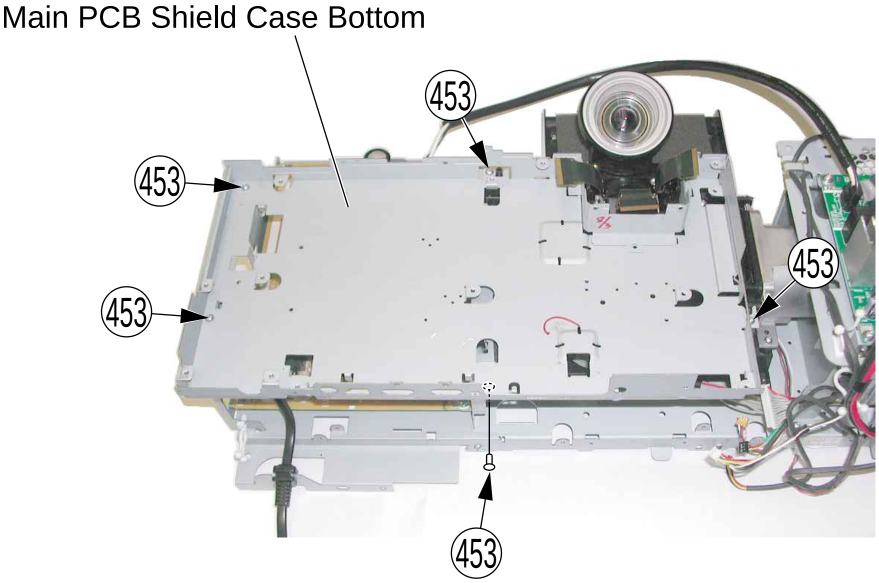

Main PCB Shield Case Bottom
453
453
453
453
453

Fig. P1-3

REMOVAL OF THE POLARIZER UNITS

1. Remove the Main PCB and the Main PCB Shield Case Bottom. Refer to Steps 1~5 in "REMOVAL OF THE MAIN P.C.B. AND THE DRIVE P.C.B. FROM THE OPT/TV UNIT."
2. Remove the 3 Joint Piece Units.
3. Remove the Polarizer Red, Green, Blue Unit by removing the 3 Screws.
   Note:
   a. Use extreme caution not to damage the Polarizer Units (Red, Green, Blue), when servicing.
   b. Clean the Polarizer Units if necessary. Refer to "Cleaning Methods" in Maintenance.

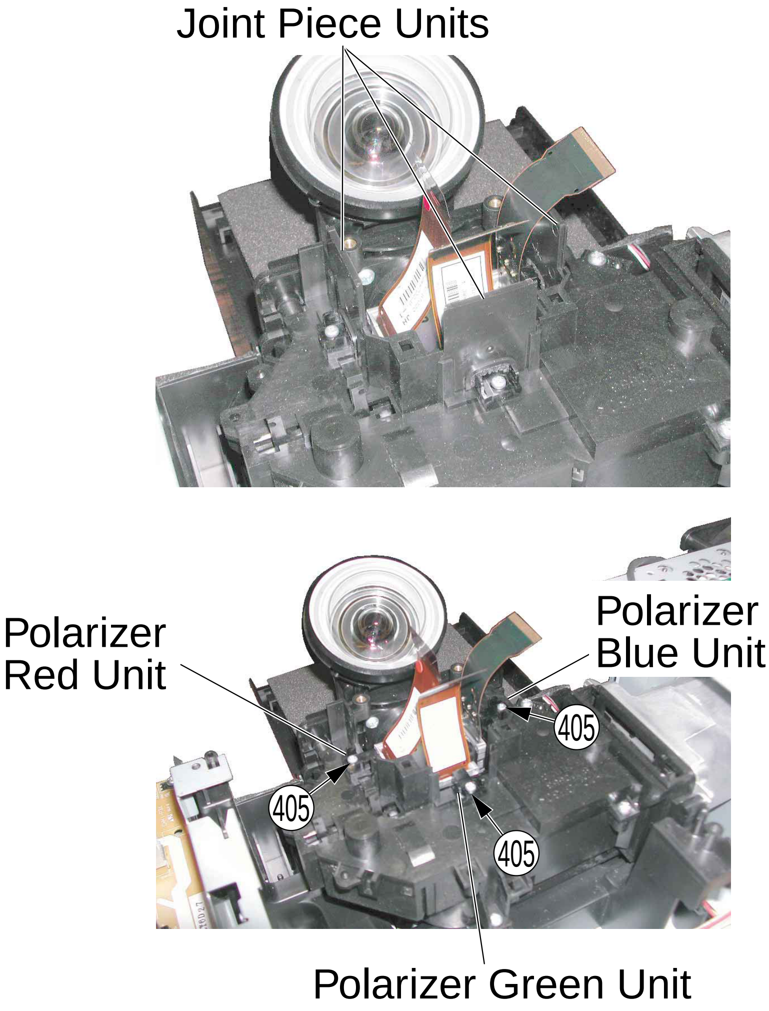

Joint Piece Units
Polarizer Red Unit
Polarizer Blue Unit
405
405
405
Polarizer Green Unit

Fig. P2-1

Reassembly Note for the Polarizer Unit (Red, Green, Blue):

a) After replacing the Polarizer Units, be sure to perform Polarizer Adjustment.
b) Make sure of the mark color to distinguish the Polarizer Units.

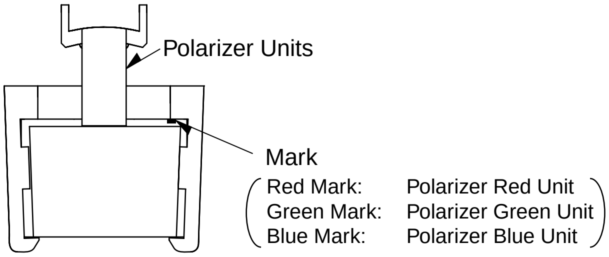
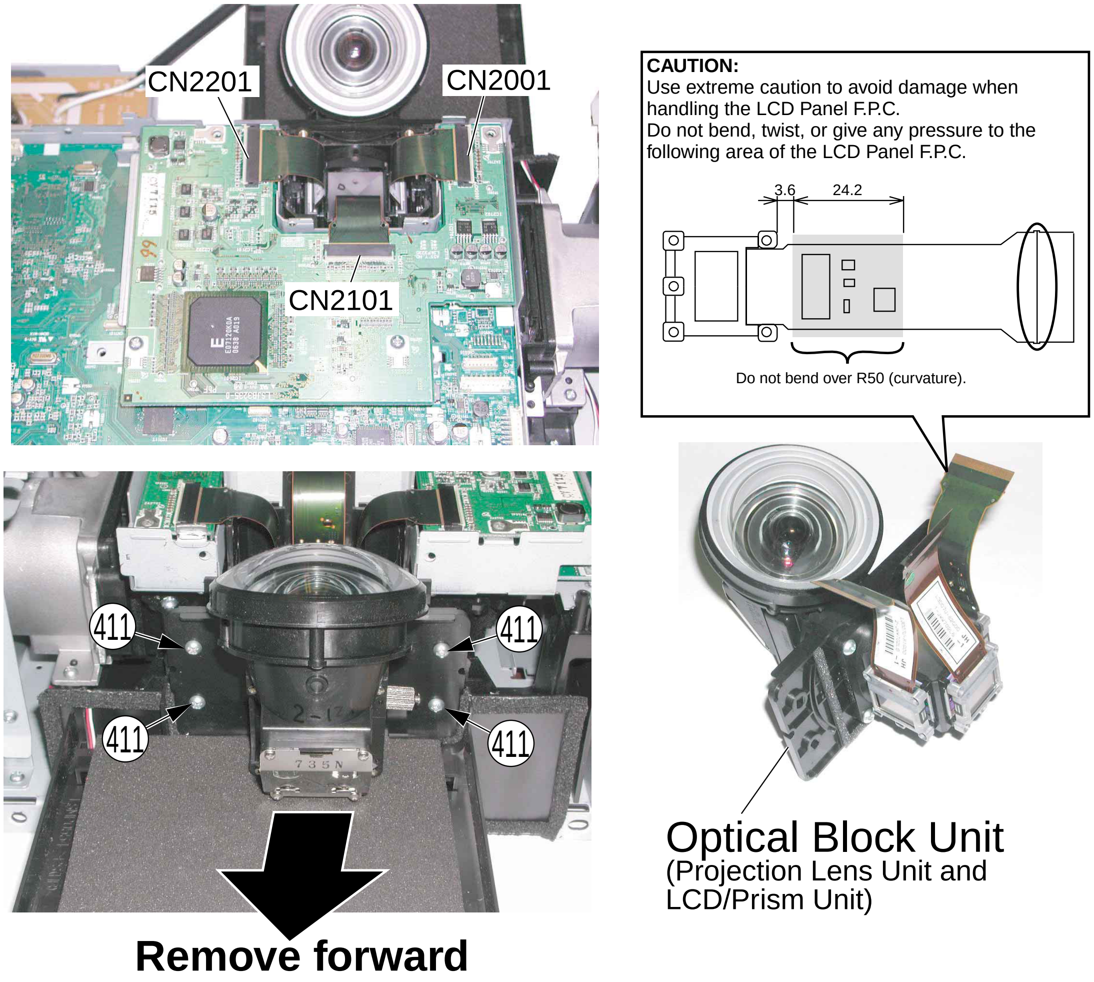

Polarizer Units
Mark
Red Mark: Polarizer Red Unit
Green Mark: Polarizer Green Unit
Blue Mark: Polarizer Blue Unit

Fig. P2-2

REMOVAL OF THE OPTICAL BLOCK UNIT (Projection Lens Unit and LCD/Prism Unit)

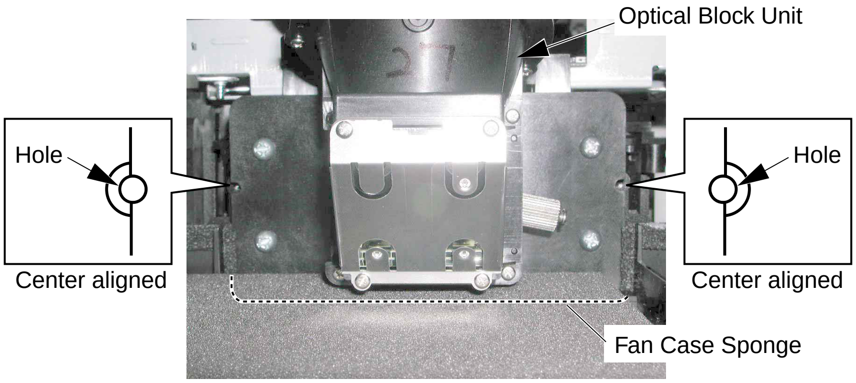
1. Remove the Main PCB Shield Case Top. Refer to Steps 1~3 in "REMOVAL OF THE MAIN P.C.B. AND THE DRIVE P.C.B. FROM THE OPT/TV UNIT."
2. 1) Disconnect Connectors CN2001, CN2101, CN2201 (LCD Flexible Flat Cable).
   2) Remove carefully the Optical Block Unit by removing the 4 Screws.
   Note:
   a. Use extreme caution when handling the LCD/Prism Unit to avoid damage, dust, spots (especially fingerprints), etc.
   b. Clean the LCD/Prism Unit if necessary. Refer to "Cleaning Methods" in Maintenance.


CN2201
CN2001
CN2101
3.6
24.2
Do not bend over R50 (curvature).
411
411
411
411
Remove forward
Optical Block Unit
(Projection Lens Unit and LCD/Prism Unit)

CAUTION:
Use extreme caution to avoid damage when handling the LCD Panel F.P.C.
Do not bend, twist, or give any pressure to the following area of the LCD Panel F.P.C.

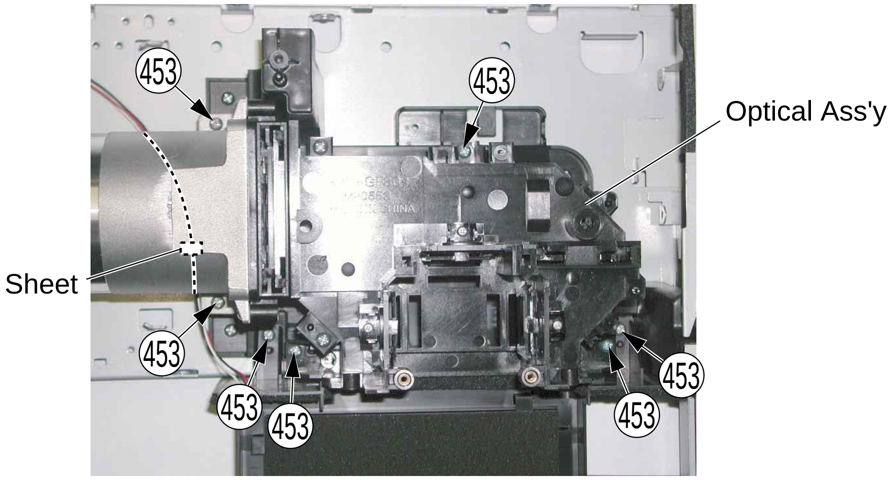
Fig. P3-1

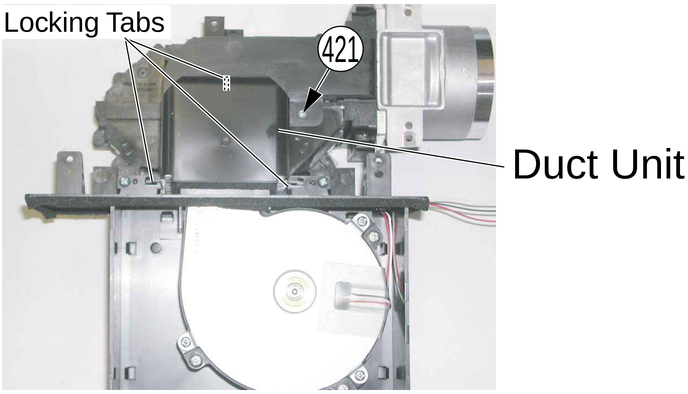
Reassembly Note for Optical Block Unit:
1. Be sure to install the Optical Block Unit so that the Fan Case Sponge, etc. will fit properly with the Optical Block Unit.
2. Install the Optical Block Unit into the position as shown.


Optical Block Unit
Hole
Hole
Center aligned
Center aligned
Fan Case Sponge

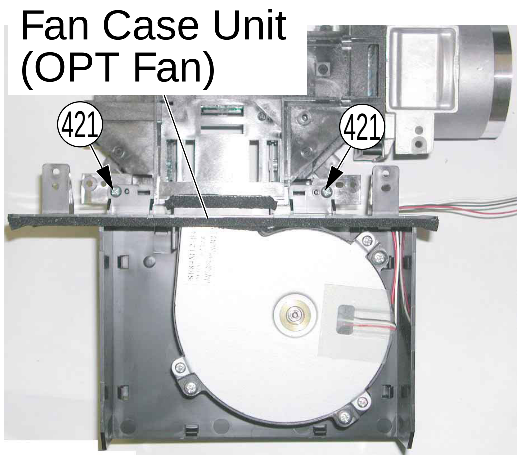
REMOVAL OF THE FAN CASE UNIT (OPT FAN), THE P/S CONVERTER, THE INTEGRATOR 1 AND THE INTEGRATOR 2

1. Remove the Lamp Ass'y. Refer to Step d in "HOW TO REPLACE THE LAMP UNIT" in the service manual (Vol.1).
2. Remove the Optical Block Unit. Refer to Steps 1~2 in "REMOVAL OF THE OPTICAL BLOCK UNIT."
3. Remove the Optical Ass'y by removing the 7 screws and a sheet.
4. 1) Remove the screw of the Duct Unit.
   2) Remove the Duct Unit while releasing the 3 Locking Tabs.
5. Remove the Fan Case Unit from the Optical Unit by removing the 2 screws.
   Note:
   Do not touch the Air Filter of the Fan Frame Unit.
   To remove the Fan Frame Unit (Air Filter), release the 8 Locking Tabs.


453
453
Optical Ass'y
Sheet
453
453
453
453
453


Locking Tabs
421
Duct Unit

<Bottom View>


Fan Case Unit
(OPT Fan)
421
421

<Bottom View>

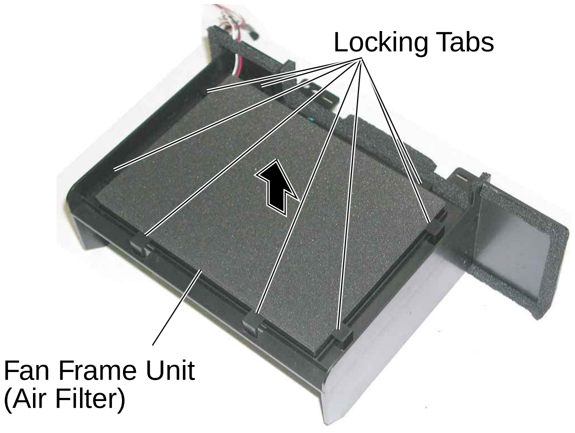
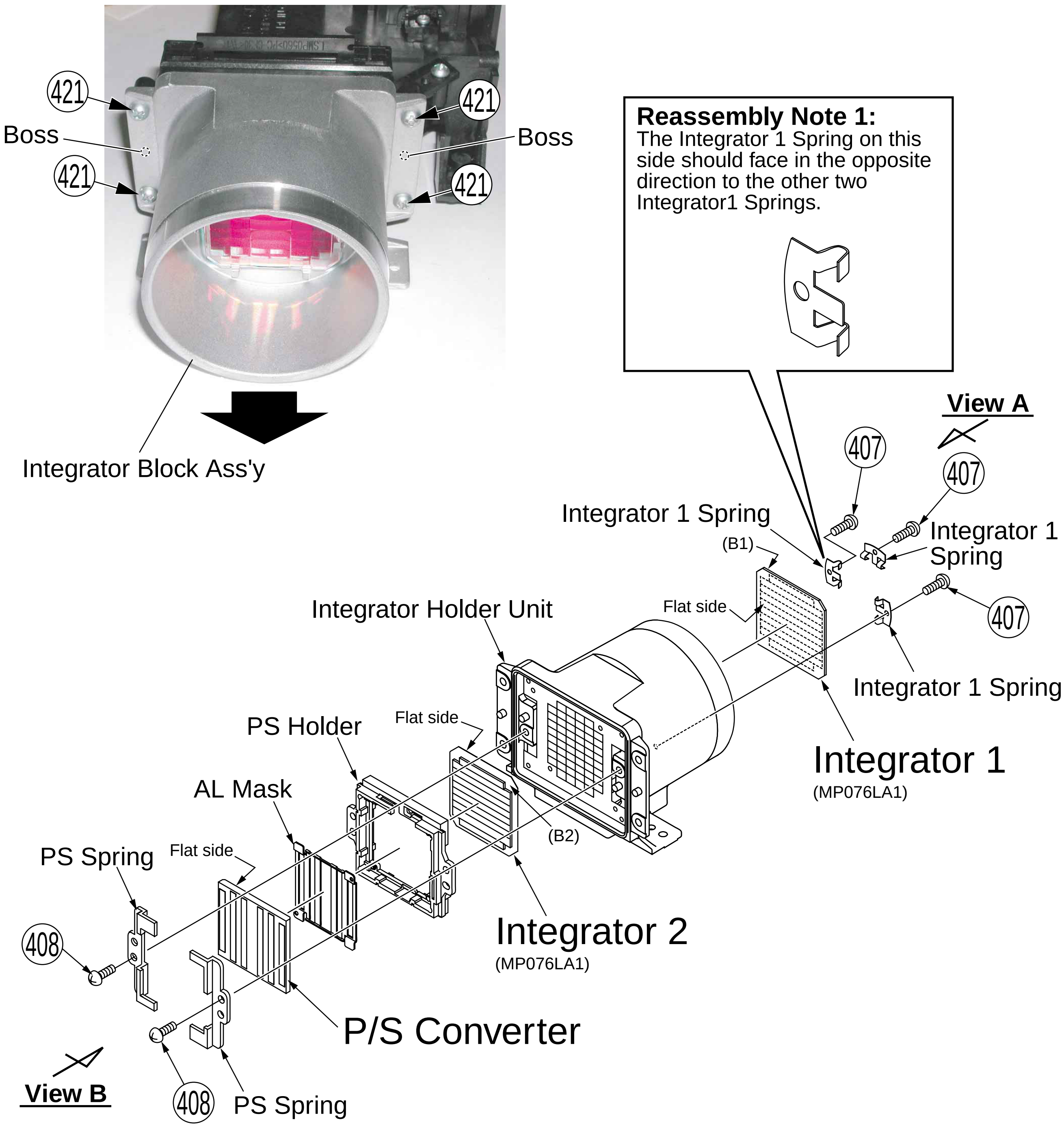

Locking Tabs
Fan Frame Unit
(Air Filter)

Fig. P4-1

6. Remove the Integrator Block Ass'y by removing the 4 screws.
7. 1) Remove the three Integrator 1 Springs by removing the 3 screws.
   2) Remove the Integrator 1 from the Integrator Holder Unit.
8. 1) Remove the two PS Springs by removing the 2 screws.
   2) Remove the P/S Converter by releasing the tabs of PS Holder.
   3) Remove the AL Mask.
   4) Remove the Integrator 2 by releasing the tabs of PS Holder.

   Note:
   Clean the optical components if necessary. Refer to "Cleaning Methods" in Maintenance.

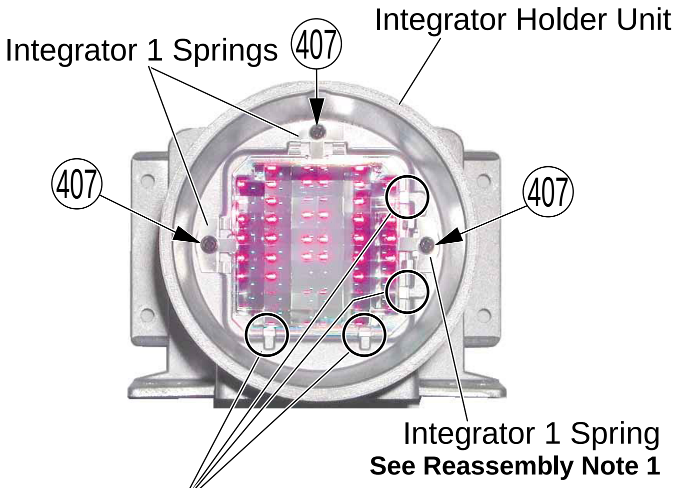


Reassembly Note 1:
The Integrator 1 Spring on this side should face in the opposite direction to the other two Integrator1 Springs.

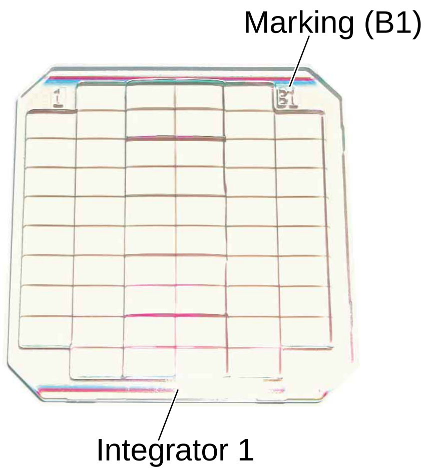
421
421
421
421
Boss
Boss
Integrator Block Ass'y
View A
407
407
407
Integrator 1 Spring
(B1)
Integrator 1 Spring
Integrator Holder Unit
Flat side
Integrator 1 Spring
PS Holder
Flat side
Integrator 1
(MP076LA1)
AL Mask
(B2)
PS Spring
Flat side
Integrator 2
(MP076LA1)
408
P/S Converter
View B
408
PS Spring

Fig. P4-2

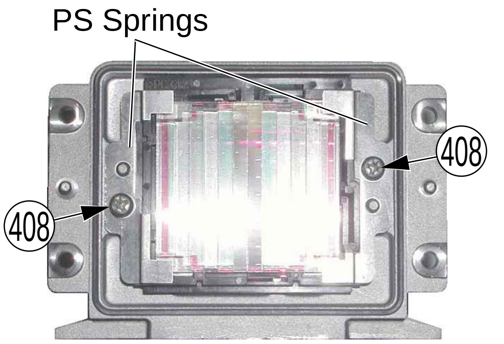
View A

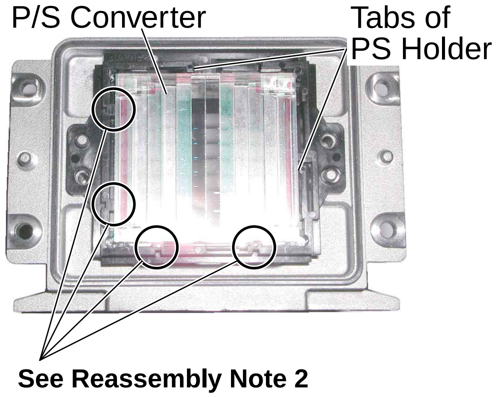

Integrator 1 Springs
407
Integrator Holder Unit
407
407
Integrator 1 Spring
See Reassembly Note 1

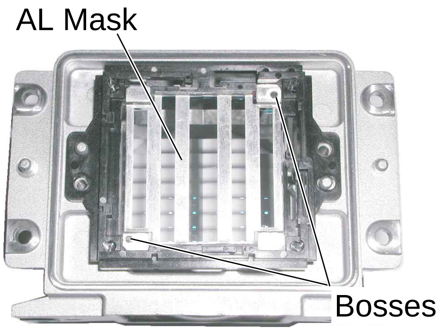
Reassembly Note 2:
Move into the position so that it is touching the 4 portions.


Marking (B1)
1
B1
Integrator 1

View B


PS Springs
408
408


P/S Converter
Tabs of
PS Holder
See Reassembly Note 2


AL Mask
Bosses

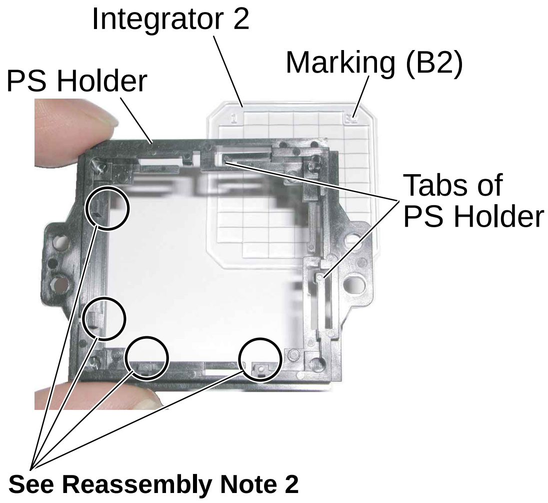

Integrator 2
PS Holder
Marking (B2)
Tabs of
PS Holder
See Reassembly Note 2

Fig. P4-3

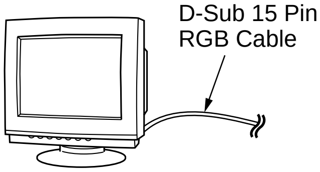
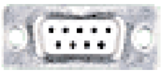
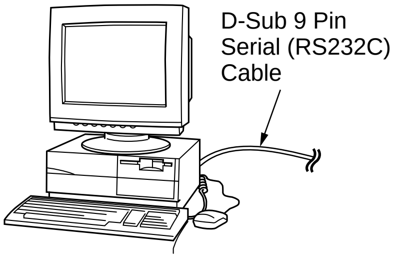
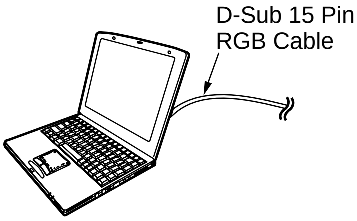
6 Measurements and Adjustments

6.1. Adjustment Procedures 2

TEST EQUIPMENT

To do all of these electrical adjustments, the following equipment is required.

1. Video Pattern Generator (480i/1080p)
2. Plastic Tip Driver and Non-Metal Driver
3. (+) Screwdriver and (-) Screwdriver
4. **PC REQUIREMENTS**
   The following PCs and Cables are required for Service Position. Prepare the following equipment locally.

PCs	Cables	Illustration	Specification
XGA Color PC Monitor	**D-Sub 15 Pin RGB Cable** for connecting the DA Board male (For Monitor P.C.B. side)	 **Note:** PC (1) can be used for monitoring.	Monitor: 17 inch XGA (1,024 X 768) Color PC Monitor or higher
PC (1) for VCOM Adjustment	**D-Sub 9 Pin Serial (RS232C) Cable** for connecting the RS232C I/F Tool (LSUA0043)  female-female	 D-Sub 9 Pin Serial (RS232C) Cable **Note:** PC (1) must have a 10-key keyboard.	Type: Desk Top PC or with 10-key keyboard (Desk Top recommended) Monitor: 17 inch XGA (1,024 X 768) Color PC Monitor or higher OS: Windows® 95,98 or later Port: D-Sub 9 Pin Serial (RS232C)
PC (2) for Test Pattern Signal	**D-Sub 15 Pin RGB Cable** for connecting the PC Input Terminal male-male	 	Type: Notebook PC recommended OS: Windows® 95,98 or later Port: RGB output

5. Test Pattern Signal : testptnmmd2002.exe
6. Application Software for VCOM Adjustment:
   2007_1080P folder (33 files)

INPUT TERMINAL INFORMATION

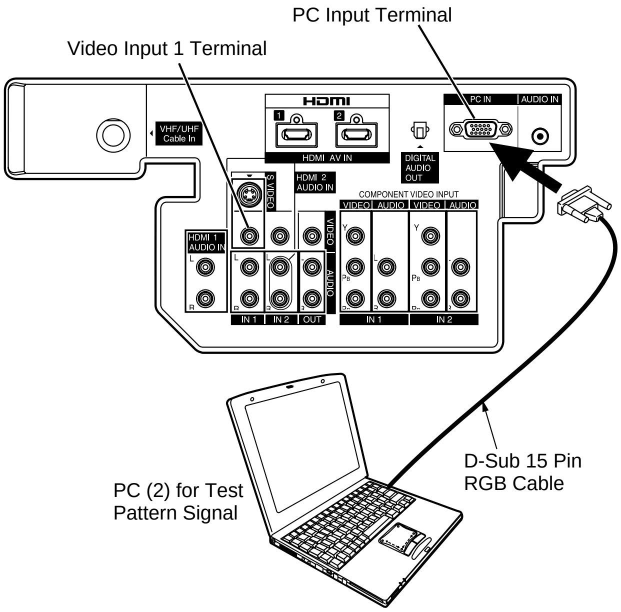

PC Input Terminal
Video Input 1 Terminal
VHF/UHF Cable In
HDMI
1
2
HDMI AV IN
DIGITAL AUDIO OUT
PC IN
AUDIO IN
S VIDEO
HDMI 2 AUDIO IN
HDMI 1 AUDIO IN
COMPONENT VIDEO INPUT
VIDEO
AUDIO
VIDEO
AUDIO
Y
PB
Y
PB
L
R
IN 1
IN 2
OUT
IN 1
IN 2
D-Sub 15 Pin RGB Cable
PC (2) for Test Pattern Signal

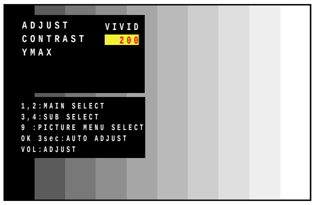
Fig. E1

CONTRAST ADJUSTMENT (Automatic Adjustment)

Note:
When replacing the EEPROM IC (IC8201), perform this adjustment.

1. Enter the Service Adjust Mode. Then, press 1 key once on the remote to enter ADJUST 1/4 screen.
2. Connect the Video Pattern Generator to the Video Input 1 Terminal and supply Gray Scale Pattern Signal (10 scales).
3. Set to Video 1 mode by pressing TV/VIDEO key on the remote.

Gray Scale Pattern Signal (10 scales)

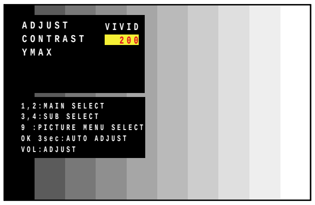


```
ADJUST          VIVID
CONTRAST          200
YMAX

1,2:MAIN SELECT
3,4:SUB SELECT
9 :PICTURE MENU SELECT
OK 3sec:AUTO ADJUST
VOL:ADJUST
```

<ADJUST 1/4>

4. Press OK key on the remote for 3 seconds.
   The value will be red while adjusting.
5. Confirm that the value is not "NG."
6. Connect the Video Pattern Generator to the Component 1 Terminal and supply Gray Scale Pattern Signal (10 scales).
7. Set to Component 1 mode by pressing TV/VIDEO key on the remote.
8. Press OK key on the remote for 3 seconds.
   The value will be red while adjusting.

Gray Scale Pattern Signal (10 scales)



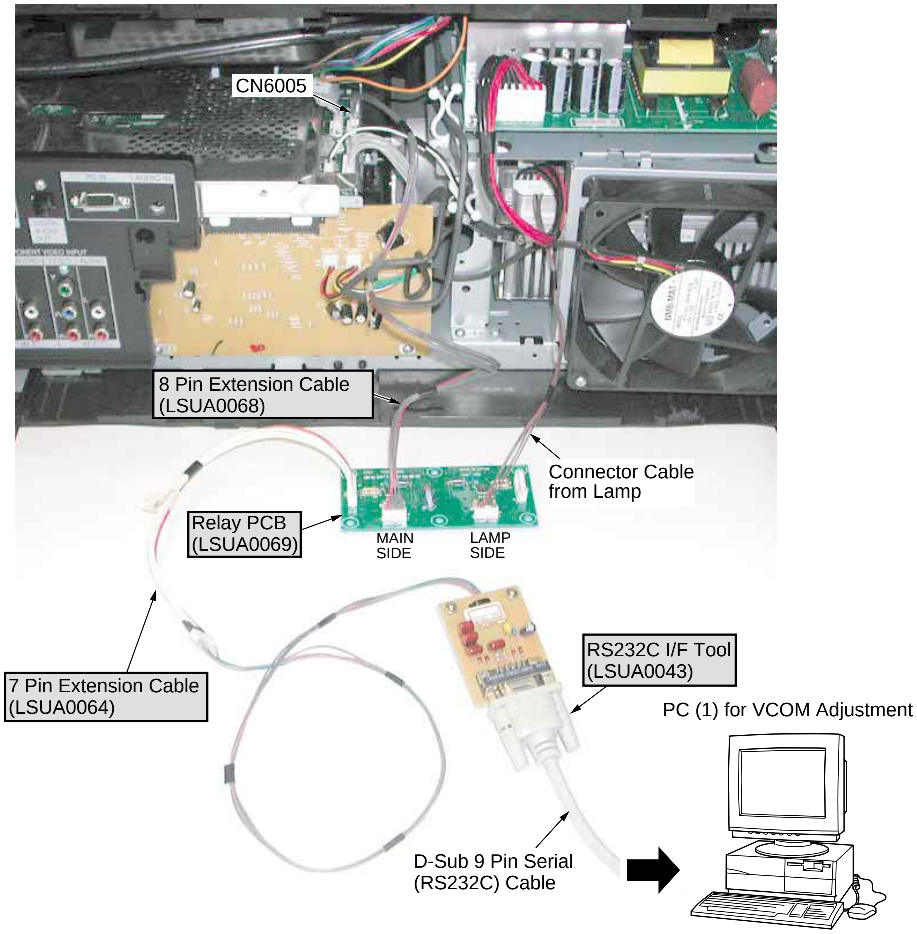
```
ADJUST          VIVID
CONTRAST          200
YMAX

1,2:MAIN SELECT
3,4:SUB SELECT
9 :PICTURE MENU SELECT
OK 3sec:AUTO ADJUST
VOL:ADJUST
```

<ADJUST 1/4>

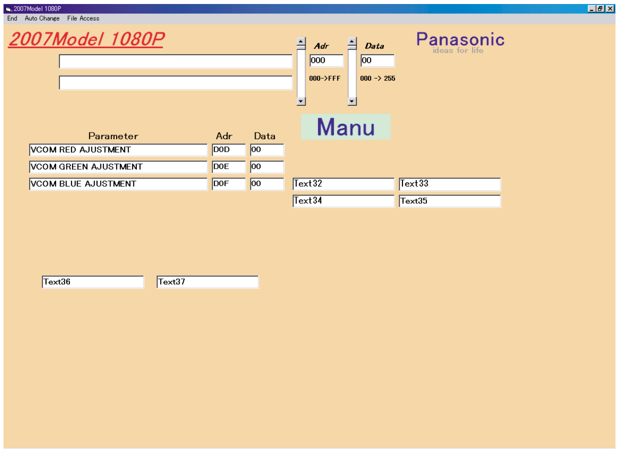
9. Confirm that the value is not "NG."
10. After adjustment, turn off the power.

SET UP for VCOM Adjustment:

1. 1) Remove the Rear Cover Unit.
   2) Disconnect Connector CN6005 on the Main P.C.B.
   3) Connect Connector CN6005 and PC (1) with the 8 Pin Extension Cable, the 7 Pin Extension Cable, the Relay PCB, the RS232C I/F Tool, the D-Sub 9 Pin Serial (RS232C) Cable.


CN6005
8 Pin Extension Cable
(LSUA0068)
Connector Cable
from Lamp
Relay PCB
(LSUA0069)
MAIN
SIDE
LAMP
SIDE
RS232C I/F Tool
(LSUA0043)
7 Pin Extension Cable
(LSUA0064)
PC (1) for VCOM Adjustment
D-Sub 9 Pin Serial
(RS232C) Cable

2. Install the software for VCOM adjustment into the PC (1).
   Note:
   The PC (1) must have a 10-key keyboard.
   1) Copy the "2007_1080P (33 files)" folder to C: Drive.
   2) Execute the "Vcom2007_1080P.exe" file.


2007Model 1080P
End
Auto Change
File Access
2007Model 1080P
Panasonic
ideas for life
Manu

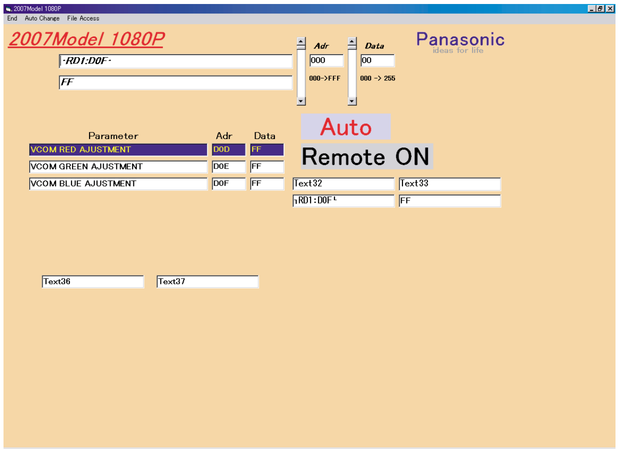
Adr: 000 (000->FFF)
Data: 00 (000 -> 255)

Parameter	Adr	Data
VCOM RED AJUSTMENT	D0D	00
VCOM GREEN AJUSTMENT	D0E	00
VCOM BLUE AJUSTMENT	D0F	00

Text32 Text33
Text34 Text35
Text36 Text37

3. Turn on the unit power.

4. To turn the remote on, press DEL key.
   "Manu" indication will change to "Auto" indication, and "Remote ON" indication will appear.
   Note:
   Confirm NUMLOCK is on. If not, turn on NUMLOCK by pressing the NUMLOCK key on the 10-key keyboard.


2007Model 1080P
End
Auto Change
File Access
2007Model 1080P
Panasonic
ideas for life
Auto
Remote ON

-RD1:D0F-
FF

Adr: 000 (000->FFF)
Data: 00 (000 -> 255)

Parameter	Adr	Data
VCOM RED AJUSTMENT	D0D	FF
VCOM GREEN AJUSTMENT	D0E	FF
VCOM BLUE AJUSTMENT	D0F	FF

Text32 Text33
┐RD1:D0F└ FF
Text36 Text37

5. Perform the VCOM Adjustment.
6. After completing adjustments, turn the remote off by pressing DEL key. Then, end the software.

VCOM ADJUSTMENT

Purpose:
To set the optimum LCD common voltage.

Symptom of Misadjustment:
The picture will be flickering.

TP	ADJ.	INPUT
	Vcom R Adjust	(PC Input Terminal) 70 % Red Horizontal Signal
	Vcom G Adjust	(PC Input Terminal) 70 % Green Horizontal Signal
	Vcom B Adjust	(PC Input Terminal) 70 % Blue Horizontal Signal

EQUIPMENT	SPECIFICATION
PC(2), Test Pattern Signal or PC with video graphics card	Refer to Description below

Note:
This method is for use with PC which has a 1080p video graphics card to output the Test Pattern Signal.

Test Pattern Signal:
- 70 % Red Horizontal Signal: "2 Red 70 %" in "2 Horizontal" of "3 Phase"
- 70 % Green Horizontal Signal: "3 Green 70 %" in "2 Horizontal" of "3 Phase"
- 70 % Blue Horizontal Signal: "4 Blue 70 %" in "2 Horizontal" of "3 Phase"

SET UP:
1. Connect the PC(2) to the PC Input Terminal with the RGB Cable.
   Note:
   PC output should be **1080p resolution**.
   A Desk Top PC with a video graphics card compatible with 1080p resolution must be used.
2. Set to PC mode by pressing TV/VIDEO key on the remote.

PROCEDURES:
1. Supply 70% Red Horizontal signal.
2. Select "VCOM RED ADJUSTMENT" in menu.
3. Adjust "VCOM RED ADJUSTMENT" by pressing 4(←), 6(→) key on the 10-key keyboard so that there are no flicker on the whole screen.
4. Supply 70% Green Horizontal signal.
5. Then, select "VCOM GREEN ADJUSTMENT" in software menu by 2(↓) or 8(↑) key on the 10-key keyboard.
6. Adjust "VCOM GREEN ADJUSTMENT" by pressing 4(←), 6(→) key on the 10-key keyboard so that the flicker on the whole screen becomes minimum and uniformity.
7. Supply 70% Blue Horizontal signal.
8. Then, select "VCOM BLUE ADJUSTMENT" in software menu by 2(↓) or 8(↑) key on the 10-key keyboard.
9. Adjust "VCOM BLUE ADJUSTMENT" by pressing 4(←), 6(→) key on the 10-key keyboard so that the flicker on the whole screen becomes minimum and uniformity.
10. End the software.
11. Turn off the unit power.

WHITE BALANCE ADJUSTMENT

Note:
1. Be sure to perform the White Balance Adjustment after the power has been on for more than 10 minutes so that color temperature is stable.
2. This adjustment should be done in a darkroom.

Purpose:
To set the standard white level for each color temperature.

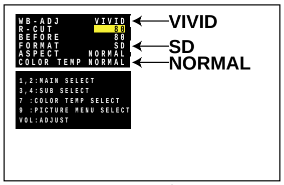
Symptom of Misadjustment:
The white color of picture will become bluish or reddish.

TP	ADJ.	INPUT
	R-CUT B-CUT R-DRV B-DRV	(COMPONENT Terminal) Gray Scale Pattern Signal (10 or 16 scales) and (PC Input Terminal) Gray Scale Pattern Signal (16 scales)

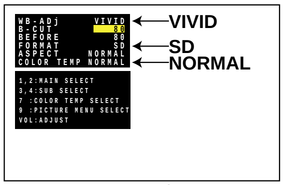
EQUIPMENT	SPECIFICATION
Video Pattern Generator (480i /1080p), or PC with video graphics card, Test Pattern Signal	Refer to Description below

SET UP :
(SD signal)
1. Connect the Viedo Pattern Generator (480i signal) to the Component Input Terminal.
2. Set to Component mode by pressing TV/VIDEO key on the remote.
3. Supply Gray Scale Pattern Signal (480i signal).
4. Enter the Service Adjust Mode by pressing VOL DOWN button and RECALL key (3 times).
5. Select WB-ADJ 1/8 screen (R-CUT) by pressing 1 key or 2 key.
6. Set the following setting in WB-ADJ 1/8 screen (R-CUT), WB-ADJ 3/8 screen (B-CUT), WB-ADJ 4/8 screen (R-DRV) and WB-ADJ 6/8 screen (B-DRV).
   - WB-ADJ: VIVID
   - FORMAT: SD
   - COLOR TEMP: NORMAL

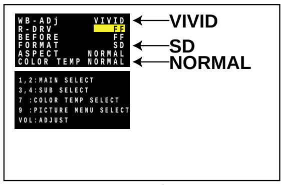
Note:
Before adjusting, memorize the default values of R-CUT, B-CUT, R-DRV and B-DRV in Service Adjust Mode.


```
WB-ADJ          VIVID
R-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP     NORMAL

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

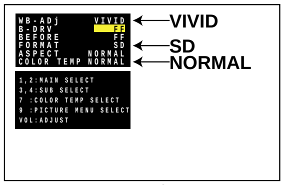
<WB-ADJ 1/8>
(R-CUT)


```
WB-ADJ          VIVID
B-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP     NORMAL

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 3/8>
(B-CUT)


```
WB-ADJ          VIVID
R-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP     NORMAL

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

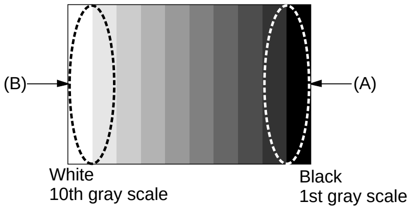
<WB-ADJ 4/8>
(R-DRV)


```
WB-ADJ          VIVID
B-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP     NORMAL

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 6/8>
(B-DRV)

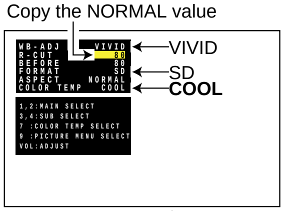
1. Adjust R-CUT and B-CUT by pressing VOL+ or VOL - key so that the area around (A) becomes pure gray with no red or blue tint.
2. Adjust R-DRV and B-DRV by pressing VOL+ or VOL - key so that the area around (B) becomes pure gray with no red or blue tint.

Gray Scale Pattern Signal (10 scales)



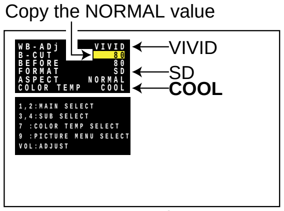
3. Set COLOR TEMP to COOL by pressing 7 key.
4. Copy the NORMAL values which were adjusted in steps 1, 2.

Copy the NORMAL value


```
WB-ADJ          VIVID
R-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

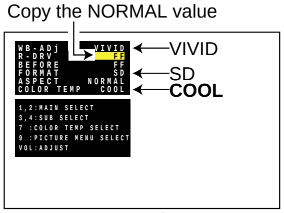
<WB-ADJ 1/8>
(R-CUT)

Copy the NORMAL value


```
WB-ADJ          VIVID
B-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

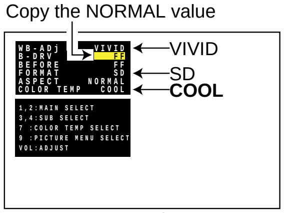
<WB-ADJ 3/8>
(B-CUT)

Copy the NORMAL value


```
WB-ADJ          VIVID
R-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 4/8>
(R-DRV)

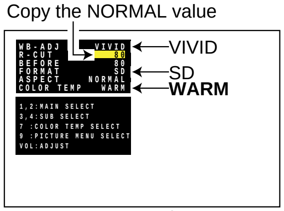
Copy the NORMAL value


```
WB-ADJ          VIVID
B-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 6/8>
(B-DRV)

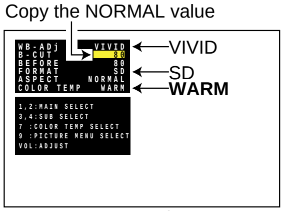
5. Set COLOR TEMP to WARM by pressing 7 key.
6. Copy the NORMAL values which were adjusted in steps 1, 2.

Copy the NORMAL value


```
WB-ADJ          VIVID
R-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       WARM

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

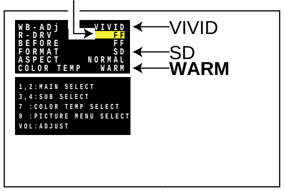
<WB-ADJ 1/8>
(R-CUT)

Copy the NORMAL value


```
WB-ADJ          VIVID
B-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       WARM

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

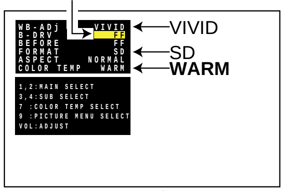
<WB-ADJ 3/8>
(B-CUT)

Copy the NORMAL value


```
WB-ADJ          VIVID
R-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       WARM

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 4/8>
(R-DRV)

Copy the NORMAL value

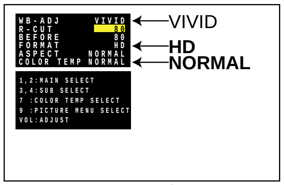

```
WB-ADJ          VIVID
B-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       WARM

1,2:MAIN SELECT
3,4:SUB SELECT
7  :COLOR TEMP SELECT
9  :PICTURE MENU SELECT
VOL:ADJUST
```

<WB-ADJ 6/8>
(B-DRV)

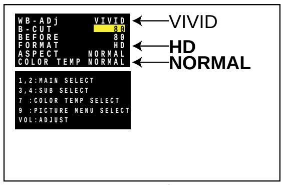
(HD signal)

Note:
This method is for use with PC which has a 1080p video graphics card to output the Test Pattern Signal.

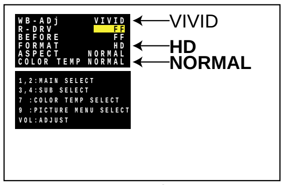
7. Connect the PC to the PC Input Terminal with the RGB Cable.
8. Set to PC mode by pressing TV/VIDEO key on the remote.
9. Supply Gray Scale Pattern Signal (1080p signal) from PC.
10. Set the following setting in WB-ADJ 1/8 screen (R-CUT), WB-ADJ 3/8 screen (B-CUT), WB-ADJ 4/8 screen (R-DRV) and WB-ADJ 6/8 screen (B-DRV).
    - WB-ADJ: VIVID (no change)
    - FORMAT: SD
    - COLOR TEMP: NORMAL


```
WB-ADJ          VIVID
R-CUT              80
BEFORE             80
FORMAT             HD
ASPECT         NORMAL
COLOR TEMP     NORMAL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
VIVID
HD
NORMAL

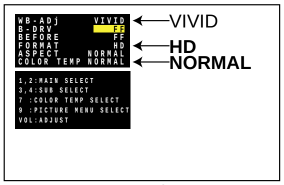
<WB-ADJ 1/8>
(R-CUT)


```
WB-ADj          VIVID
B-CUT              80
BEFORE             80
FORMAT             HD
ASPECT         NORMAL
COLOR TEMP     NORMAL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
VIVID
HD
NORMAL

<WB-ADJ 3/8>
(B-CUT)


```
WB-ADj          VIVID
R-DRV              FF
BEFORE             FF
FORMAT             HD
ASPECT         NORMAL
COLOR TEMP     NORMAL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
VIVID
HD
NORMAL

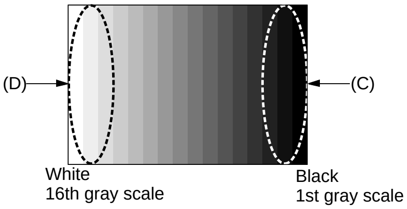
<WB-ADJ 4/8>
(R-DRV)


```
WB-ADj          VIVID
B-DRV              FF
BEFORE             FF
FORMAT             HD
ASPECT         NORMAL
COLOR TEMP     NORMAL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
VIVID
HD
NORMAL

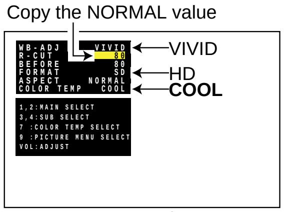
<WB-ADJ 6/8>
(B-DRV)

11. Adjust R-CUT and B-CUT by pressing VOL+ or VOL - key so that the area around (C) becomes pure gray with no red or blue tint.
12. Adjust R-DRV and B-DRV by pressing VOL+ or VOL - key so that the area around (D) becomes pure gray with no red or blue tint.

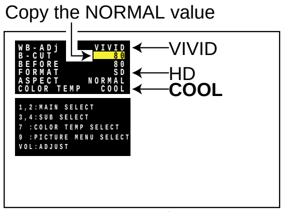
Gray Scale Pattern Signal (16 scales)


(D)
(C)
White
16th gray scale
Black
1st gray scale

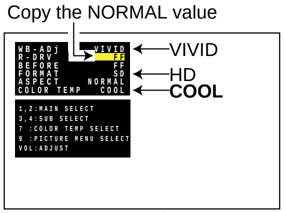
13. Set COLOR TEMP to COOL by pressing 7 key.
14. Copy the NORMAL values which were adjusted in steps 11, 12.


```
WB-ADJ          VIVID
R-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
Copy the NORMAL value
VIVID
HD
COOL

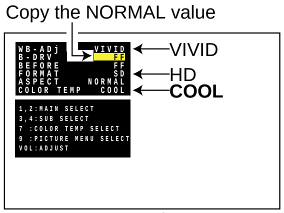
<WB-ADJ 1/8>
(R-CUT)


```
WB-ADj          VIVID
B-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
Copy the NORMAL value
VIVID
HD
COOL

<WB-ADJ 3/8>
(B-CUT)

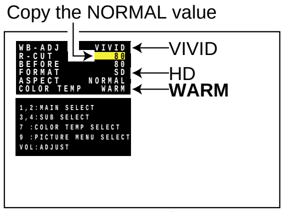

```
WB-ADj          VIVID
R-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
Copy the NORMAL value
VIVID
HD
COOL

<WB-ADJ 4/8>
(R-DRV)

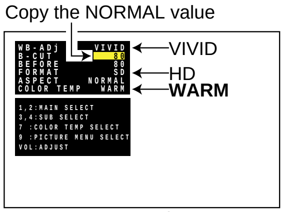

```
WB-ADj          VIVID
B-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       COOL

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
Copy the NORMAL value
VIVID
HD
COOL

<WB-ADJ 6/8>
(B-DRV)

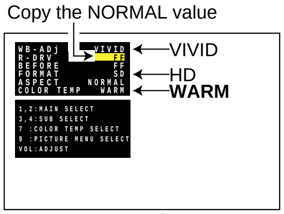
15. Set COLOR TEMP to WARM by pressing 7 key.
16. Copy the NORMAL values which were adjusted in steps 11, 12.


```
WB-ADJ          VIVID
R-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       WARM

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
Copy the NORMAL value
VIVID
HD
WARM

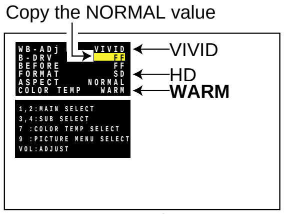
<WB-ADJ 1/8>
(R-CUT)


```
WB-ADj          VIVID
B-CUT              80
BEFORE             80
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       WARM

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
Copy the NORMAL value
VIVID
HD
WARM

<WB-ADJ 3/8>
(B-CUT)


```
WB-ADj          VIVID
R-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       WARM

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
Copy the NORMAL value
VIVID
HD
WARM

<WB-ADJ 4/8>
(R-DRV)


```
WB-ADj          VIVID
B-DRV              FF
BEFORE             FF
FORMAT             SD
ASPECT         NORMAL
COLOR TEMP       WARM

1,2:MAIN SELECT
3,4:SUB SELECT
7 :COLOR TEMP SELECT
9 :PICTURE MENU SELECT
VOL:ADJUST
```
Copy the NORMAL value
VIVID
HD
WARM

<WB-ADJ 6/8>
(B-DRV)

17. Confirm the screen with COLOR TEMP NORMAL/COOL/WARM of SD and HD.
    If NG, repeat steps 1~16.
    If OK, the adjustment is complete.

POLARIZER ADJUSTMENT (Mechanical Adjustment)

Purpose:
To set the polarizer in the proper position.

Symptom of Misadjustment:
The picture will become bluish or reddish or greenish.

<table>
<tr><th>TP</th><th>ADJ.</th><th>INPUT</th></tr>
<tr><td></td><td>Polarizer Green
Polarizer Red
Polarizer Blue</td><td>No signal input (Black screen is displayed.) (SET UP 1)
or
(PC Input Terminal)
Black Signal (SET UP 2)
or
(VIDEO Input 1 Terminal)
Black Signal (SET UP 3)</td></tr>
<tr><th colspan="2">EQUIPMENT</th><th>SPECIFICATION</th></tr>
<tr><td colspan="2">Screwdriver (+),
PC(2), Test Pattern Signal,
(Video Pattern Generator)</td><td>Refer to Description below</td></tr>
</table>

Note:
This adjustment should be done in a darkroom.

Test Pattern Signal:
- Black Signal: "8 Black" in "1 Color"

SET UP 1:
1. Place the unit into Service Position.
2. Set to a desired mode except TV mode by pressing TV/VIDEO key on the remote.
3. No signal input.
4. Perform Polarizer (Green, Red and Blue) Adjustment as follows in order.

OR

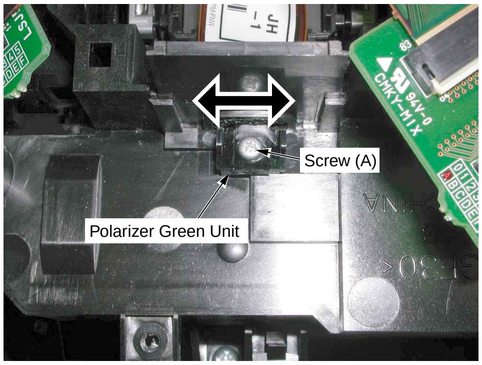
SET UP 2:
1. Place the unit into Service Position.
2. Connect the PC (2) to the PC Input Terminal with the RGB cable.
3. Supply Black Signal and set to PC mode by pressing TV/VIDEO key on the remote.
4. Perform Polarizer (Green, Red and Blue) Adjustment as follows in order.

OR

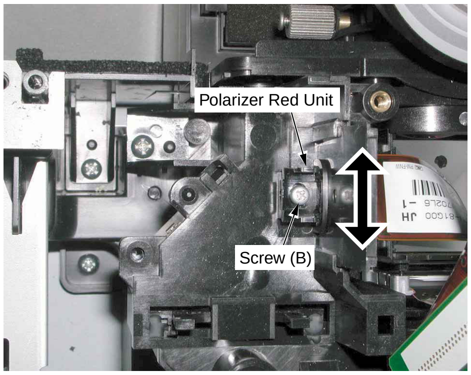
SET UP 3:
1. Place the unit into Service Position.
2. Connect the NTSC Video Pattern Generator to the VIDEO Input 1 Terminal.
3. Supply Black Signal and set to VIDEO 1 mode by pressing TV/VIDEO key on the remote.
4. Perform Polarizer (Green, Red and Blue) Adjustment as follows in order.

Note:
Confirm that the picture will become black (not become bluish or reddish or greenish) after adjustment.

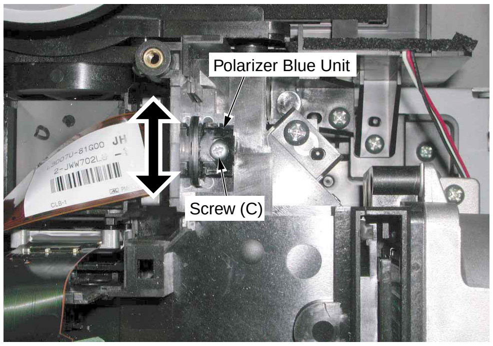
POLARIZER GREEN ADJUSTMENT
1. Loosen a Screw (A) of the Polarizer Green Unit.
2. Move the Polarizer Green Unit to the right and left so that there is no green tint on the whole screen, and then tighten a Screw (A) (30+/-10 N•cm).



POLARIZER RED ADJUSTMENT
1. Loosen a Screw (B) of the Light IN Polarizer Red Unit.
2. Move the Light IN Polarizer Red Unit to the right and left so that there is no red tint on the whole screen, and then tighten a Screw (B) (30+/-10 N•cm).



POLARIZER BLUE ADJUSTMENT
1. Loosen a Screw (C) of the Light IN Polarizer Blue Unit.
2. Move the Light IN Polarizer Blue Unit to the right and left so that there is no blue tint on the whole screen, and tighten a Screw (C) (30+/-10 N•cm).



7 Maintenance

7.1. Cleaning Methods

THE LCD PANEL OF THE OPTICAL BLOCK UNIT

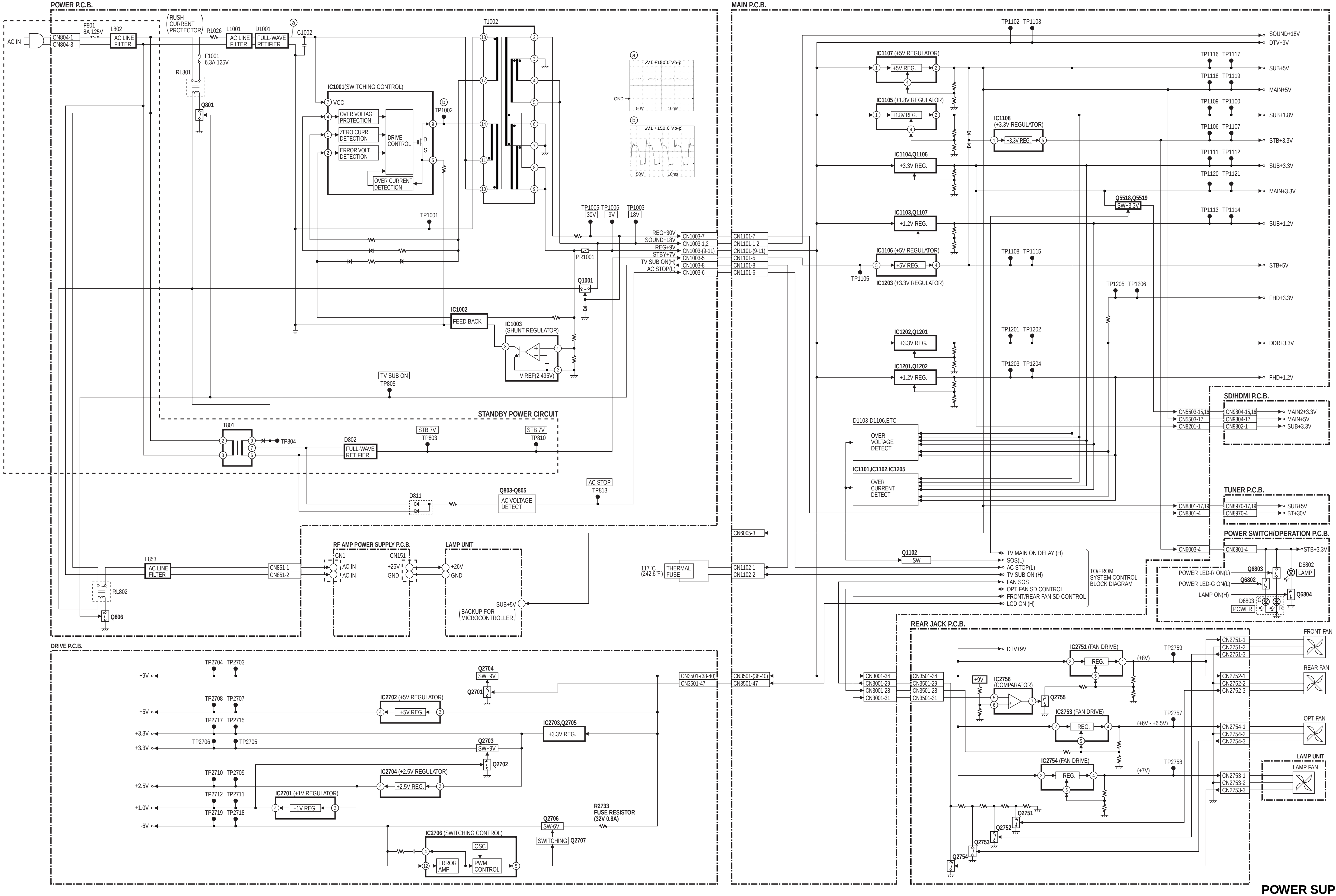
1) Clean the surface of the LCD Panel of the LCD/Prism Unit with an air blower or wipe with a clean, or soft blush lightly.
2) If any dirt remains, lightly wipe the surface with a cotton swab moistened with pure ethyl alcohol or a lens cleaner which contains no water or oil. Use a new swab after each wiping so that dirt will not be re-deposited on the surface.

THE POLARIZER UNIT, THE INTEGRATOR 1/2, THE P/S CONVERTER,

Make sure that no dust gets on the optical components such as the Polarizer Unit, Integrator and P/S Converter. Clean these optical components with cleaning paper moistened with pure ethyl alcohol or a lens cleaner which contains no water or oil.

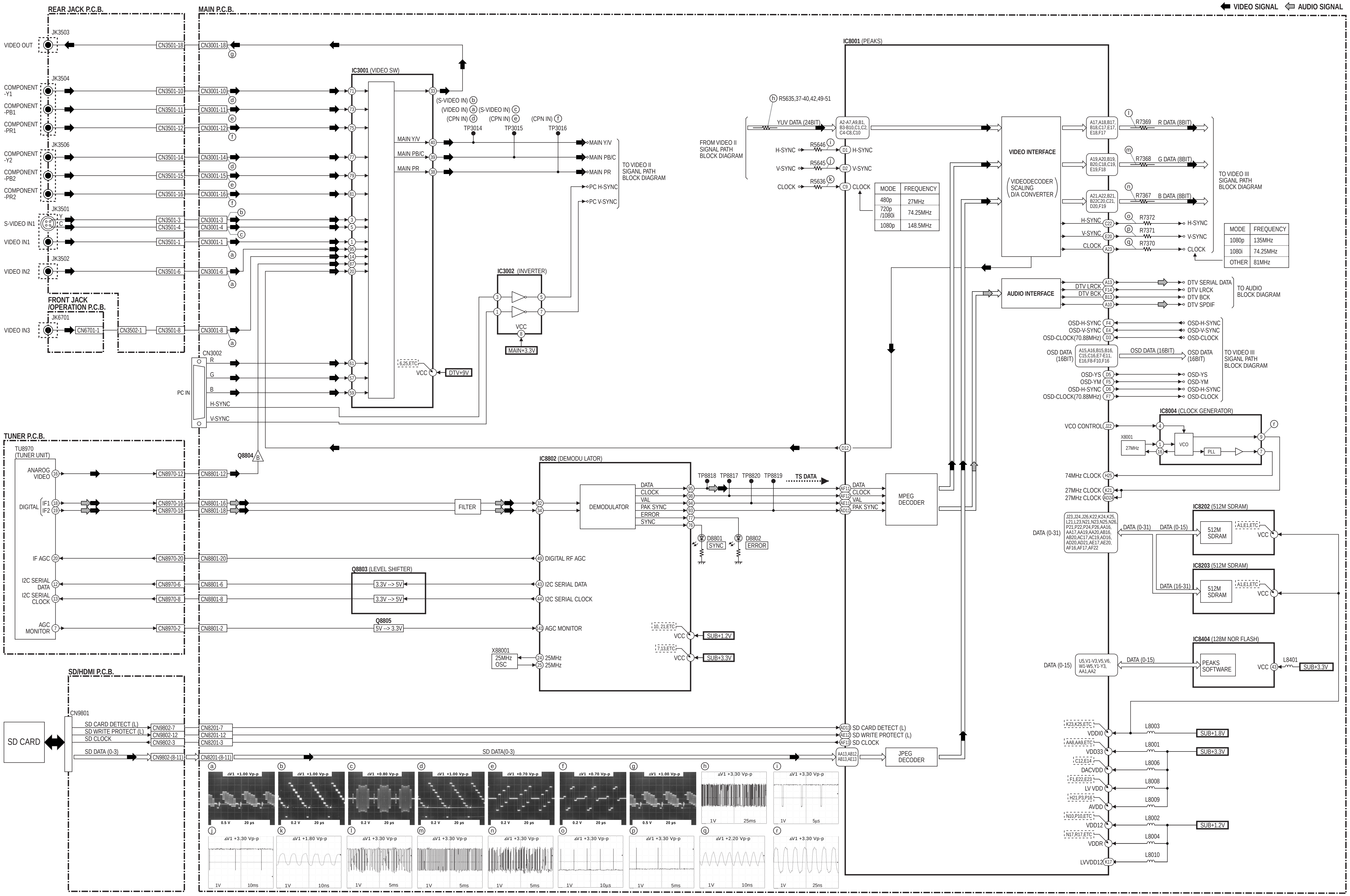
8 Block Diagrams

POWER SUPPLY BLOCK DIAGRAM


POWER P.C.B.
MAIN P.C.B.
AC IN
CN804-1
CN804-3
F801 8A 125V
L802
AC LINE FILTER
RUSH CURRENT PROTECTOR
R1026
L1001
AC LINE FILTER
D1001
FULL-WAVE RETIFIER
C1002
F1001 6.3A 125V
RL801
Q801
T1002
IC1001(SWITCHING CONTROL)
VCC
OVER VOLTAGE PROTECTION
ZERO CURR. DETECTION
ERROR VOLT. DETECTION
DRIVE CONTROL
OVER CURRENT DETECTION
TP1002
TP1001
TP1005 TP1006 TP1003
30V 9V 18V
REG+30V
SOUND+18V
REG+9V
STBY+7V
TV SUB ON(H)
AC STOP(L)
CN1003-7
CN1003-1,2
CN1003-(9-11)
CN1003-5
CN1003-8
CN1003-6
PR1001
Q1001
IC1002
FEED BACK
IC1003 (SHUNT REGULATOR)
V-REF(2.495V)
TV SUB ON
TP805
STANDBY POWER CIRCUIT
T801
TP804
D802
FULL-WAVE RETIFIER
STB 7V
TP803
STB 7V
TP810
AC STOP
TP813
Q803-Q805
AC VOLTAGE DETECT
D811
ΔV1 +150.0 Vp-p
GND
50V 10ms
L853
AC LINE FILTER
RL802
Q806
CN851-1
CN851-2
RF AMP POWER SUPPLY P.C.B.
CN1
CN151
AC IN
AC IN
+26V
GND
LAMP UNIT
+26V
GND
SUB+5V
BACKUP FOR MICROCONTROLLER
DRIVE P.C.B.
+9V
+5V
+3.3V
+3.3V
+2.5V
+1.0V
-6V
TP2704 TP2703
TP2708 TP2707
TP2717 TP2715
TP2706 TP2705
TP2710 TP2709
TP2712 TP2711
TP2719 TP2718
Q2704 SW+9V
Q2701
IC2702 (+5V REGULATOR)
+5V REG.
IC2703,Q2705
+3.3V REG.
Q2703 SW+9V
Q2702
IC2704 (+2.5V REGULATOR)
+2.5V REG.
IC2701 (+1V REGULATOR)
+1V REG.
Q2706 SW-6V
R2733 FUSE RESISTOR (32V 0.8A)
SWITCHING Q2707
IC2706 (SWITCHING CONTROL)
OSC
ERROR AMP
PWM CONTROL
CN3501-(38-40)
CN3501-47
CN1101-7
CN1101-1,2
CN1101-(9-11)
CN1101-5
CN1101-8
CN1101-6
TP1102 TP1103
SOUND+18V
DTV+9V
IC1107 (+5V REGULATOR)
+5V REG.
IC1105 (+1.8V REGULATOR)
+1.8V REG.
IC1108 (+3.3V REGULATOR)
+3.3V REG.
IC1104,Q1106
+3.3V REG.
IC1103,Q1107
+1.2V REG.
IC1106 (+5V REGULATOR)
+5V REG.
TP1105
IC1203 (+3.3V REGULATOR)
IC1202,Q1201
+3.3V REG.
IC1201,Q1202
+1.2V REG.
Q5518,Q5519 SW+3.3V
TP1116 TP1117
SUB+5V
TP1118 TP1119
MAIN+5V
TP1109 TP1100
SUB+1.8V
TP1106 TP1107
STB+3.3V
TP1111 TP1112
SUB+3.3V
TP1120 TP1121
MAIN+3.3V
TP1113 TP1114
SUB+1.2V
TP1108 TP1115
STB+5V
TP1205 TP1206
FHD+3.3V
TP1201 TP1202
DDR+3.3V
TP1203 TP1204
FHD+1.2V
D1103-D1106,ETC
OVER VOLTAGE DETECT
IC1101,IC1102,IC1205
OVER CURRENT DETECT
SD/HDMI P.C.B.
CN5503-15,16
CN5503-17
CN8201-1
CN9804-15,16
CN9804-17
CN9802-1
MAIN2+3.3V
MAIN+5V
SUB+3.3V
TUNER P.C.B.
CN8801-17,19
CN8801-4
CN8970-17,19
CN8970-4
SUB+5V
BT+30V
POWER SWITCH/OPERATION P.C.B.
CN6005-3
CN6003-4
CN6801-4
STB+3.3V
Q6803
D6802 LAMP
POWER LED-R ON(L)
Q6802
POWER LED-G ON(L)
LAMP ON(H)
Q6804
D6803 POWER
G R
Q1102 SW
TV MAIN ON DELAY (H)
SOS(L)
AC STOP(L)
TV SUB ON (H)
FAN SOS
OPT FAN SD CONTROL
FRONT/REAR FAN SD CONTROL
LCD ON (H)
TO/FROM SYSTEM CONTROL BLOCK DIAGRAM
117℃ (242.6℉)
THERMAL FUSE
CN1102-1
CN1102-2
REAR JACK P.C.B.
CN3001-34
CN3001-29
CN3001-28
CN3001-31
CN3501-34
CN3501-29
CN3501-28
CN3501-31
DTV+9V
IC2751 (FAN DRIVE)
REG.
(+8V)
TP2759
+9V
IC2756 (COMPARATOR)
Q2755
IC2753 (FAN DRIVE)
(+6V - +6.5V)
TP2757
IC2754 (FAN DRIVE)
(+7V)
TP2758
Q2751
Q2752
Q2753
Q2754
CN2751-1
CN2751-2
CN2751-3
FRONT FAN
CN2752-1
CN2752-2
CN2752-3
REAR FAN
CN2754-1
CN2754-2
CN2754-3
OPT FAN
LAMP UNIT
LAMP FAN
CN2753-1
CN2753-2
CN2753-3

POWER SUPPLY BLOCK DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

VIDEO SIGNAL PATH I BLOCK DIAGRAM

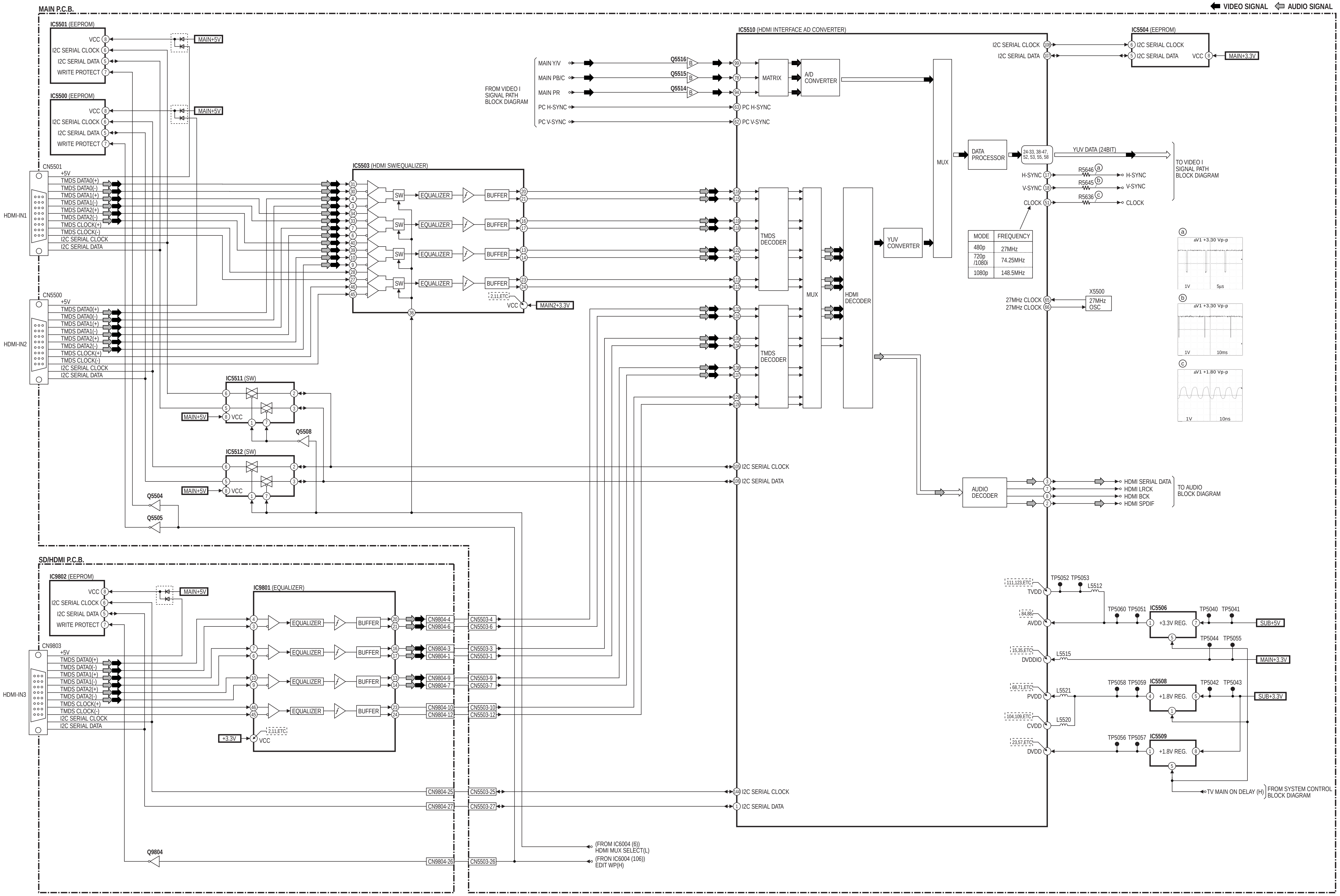

VIDEO SIGNAL
AUDIO SIGNAL
REAR JACK P.C.B.
MAIN P.C.B.
JK3503
VIDEO OUT
CN3501-18
CN3001-18
JK3504
COMPONENT -Y1
COMPONENT -PB1
COMPONENT -PR1
CN3501-10
CN3501-11
CN3501-12
CN3001-10
CN3001-11
CN3001-12
JK3506
COMPONENT -Y2
COMPONENT -PB2
COMPONENT -PR2
CN3501-14
CN3501-15
CN3501-16
CN3001-14
CN3001-15
CN3001-16
JK3501
S-VIDEO IN1
VIDEO IN1
CN3501-3
CN3501-4
CN3501-1
CN3001-3
CN3001-4
CN3001-1
JK3502
VIDEO IN2
CN3501-6
CN3001-6
FRONT JACK /OPERATION P.C.B.
JK6701
VIDEO IN3
CN6701-1
CN3502-1
CN3501-8
CN3001-8
IC3001 (VIDEO SW)
(S-VIDEO IN)
(VIDEO IN)
(CPN IN)
TP3014
TP3015
TP3016
MAIN Y/V
MAIN PB/C
MAIN PR
PC H-SYNC
PC V-SYNC
TO VIDEO II SIGANL PATH BLOCK DIAGRAM
6,25,ETC
VCC
DTV+9V
IC3002 (INVERTER)
VCC
MAIN+3.3V
CN3002
R
G
B
H-SYNC
V-SYNC
PC IN
Q8804
TUNER P.C.B.
TU8970 (TUNER UNIT)
ANAROG VIDEO
DIGITAL
IF1
IF2
IF AGC
I2C SERIAL DATA
I2C SERIAL CLOCK
AGC MONITOR
CN8970-12
CN8970-16
CN8970-18
CN8970-20
CN8970-6
CN8970-8
CN8970-2
CN8801-12
CN8801-16
CN8801-18
CN8801-20
CN8801-6
CN8801-8
CN8801-2
FILTER
IC8802 (DEMODU LATOR)
DEMODULATOR
DATA
CLOCK
VAL
PAK SYNC
ERROR
SYNC
DIGITAL RF AGC
I2C SERIAL DATA
I2C SERIAL CLOCK
AGC MONITOR
Q8803 (LEVEL SHIFTER)
3.3V --> 5V
3.3V --> 5V
Q8805
5V --> 3.3V
X88001
25MHz OSC
25MHz
25MHz
10, 21,ETC
VCC
SUB+1.2V
7,13,ETC
VCC
SUB+3.3V
TP8818
TP8817
TP8820
TP8819
TS DATA
D8801
SYNC
D8802
ERROR
SD/HDMI P.C.B.
CN9801
SD CARD
SD CARD DETECT (L)
SD WRITE PROTECT (L)
SD CLOCK
SD DATA (0-3)
CN9802-7
CN9802-12
CN9802-3
CN9802-(8-11)
CN8201-7
CN8201-12
CN8201-3
CN8201-(8-11)
SD DATA(0-3)
IC8001 (PEAKS)
R5635,37-40,42,49-51
FROM VIDEO II SIGNAL PATH BLOCK DIAGRAM
YUV DATA (24BIT)
A2-A7,A9,B1, B3-B10,C1,C2, C4-C8,C10
H-SYNC
V-SYNC
CLOCK
R5646
R5645
R5636
VIDEO INTERFACE
(VIDEODECODER SCALING D/A CONVERTER)
A17,A18,B17, B18,C17,E17, E18,F17
A19,A20,B19, B20,C18,C19, E19,F18
A21,A22,B21, B22C20,C21, D20,F19
R7369
R DATA (8BIT)
R7368
G DATA (8BIT)
R7367
B DATA (8BIT)
R7372
R7371
R7370
TO VIDEO III SIGANL PATH BLOCK DIAGRAM
AUDIO INTERFACE
DTV LRCK
DTV BCK
DTV SERIAL DATA
DTV LRCK
DTV BCK
DTV SPDIF
TO AUDIO BLOCK DIAGRAM
OSD-H-SYNC
OSD-V-SYNC
OSD-CLOCK(70.88MHz)
OSD DATA (16BIT)
A15,A16,B15,B16, C15,C16,E7-E11, E16,F8-F10,F16
OSD-YS
OSD-YM
OSD-CLOCK
TO VIDEO III SIGNAL PATH BLOCK DIAGRAM
IC8004 (CLOCK GENERATOR)
VCO CONTROL
X8001
27MHz
VCO
PLL
74MHz CLOCK
27MHz CLOCK
MPEG DECODER
DATA (0-31)
IC8202 (512M SDRAM)
512M SDRAM
A1,E1,ETC
VCC
DATA (0-15)
IC8203 (512M SDRAM)
DATA (16-31)
IC8404 (128M NOR FLASH)
PEAKS SOFTWARE
DATA (0-15)
U5,V1-V3,V5,V6, W1-W5,Y1-Y3, AA1,AA2
L8401
SUB+3.3V
JPEG DECODER
AA13,AB12, AB13,AE13
K23,K25,ETC
VDDI0
L8003
SUB+1.8V
AA8,AA9,ETC
VDD33
L8001
SUB+3.3V
C12,E14
DACVDD
L8006
F1,E22,E23
LV VDD
L8008
H21,P3,P16
AVDD
L8009
N10,P10,ETC
VDD12
L8002
SUB+1.2V
N17,R17,ETC
VDDR
L8004
LVVDD12
L8010
a ΔV1 +1.00 Vp-p 0.5 V 20 µs
b ΔV1 +1.00 Vp-p 0.2 V 20 µs
c ΔV1 +0.80 Vp-p 0.2 V 20 µs
d ΔV1 +1.00 Vp-p 0.2 V 20 µs
e ΔV1 +0.70 Vp-p 0.2 V 20 µs
f ΔV1 +0.70 Vp-p 0.2 V 20 µs
g ΔV1 +1.00 Vp-p 0.5 V 20 µs
h ΔV1 +3.30 Vp-p 1V 25ms
i ΔV1 +3.30 Vp-p 1V 5µs
j ΔV1 +3.30 Vp-p 1V 10ns
k ΔV1 +1.80 Vp-p 1V 10ns
l ΔV1 +3.30 Vp-p 1V 5ms
m ΔV1 +3.30 Vp-p 1V 5ms
n ΔV1 +3.30 Vp-p 1V 5ms
o ΔV1 +3.30 Vp-p 1V 10µs
p ΔV1 +3.30 Vp-p 1V 5ms
q ΔV1 +2.20 Vp-p 1V 10ns
r ΔV1 +3.30 Vp-p 1V 25ns

MODE	FREQUENCY
480p	27MHz
720p /1080i	74.25MHz
1080p	148.5MHz

MODE	FREQUENCY
1080p	135MHz
1080i	74.25MHz
OTHER	81MHz

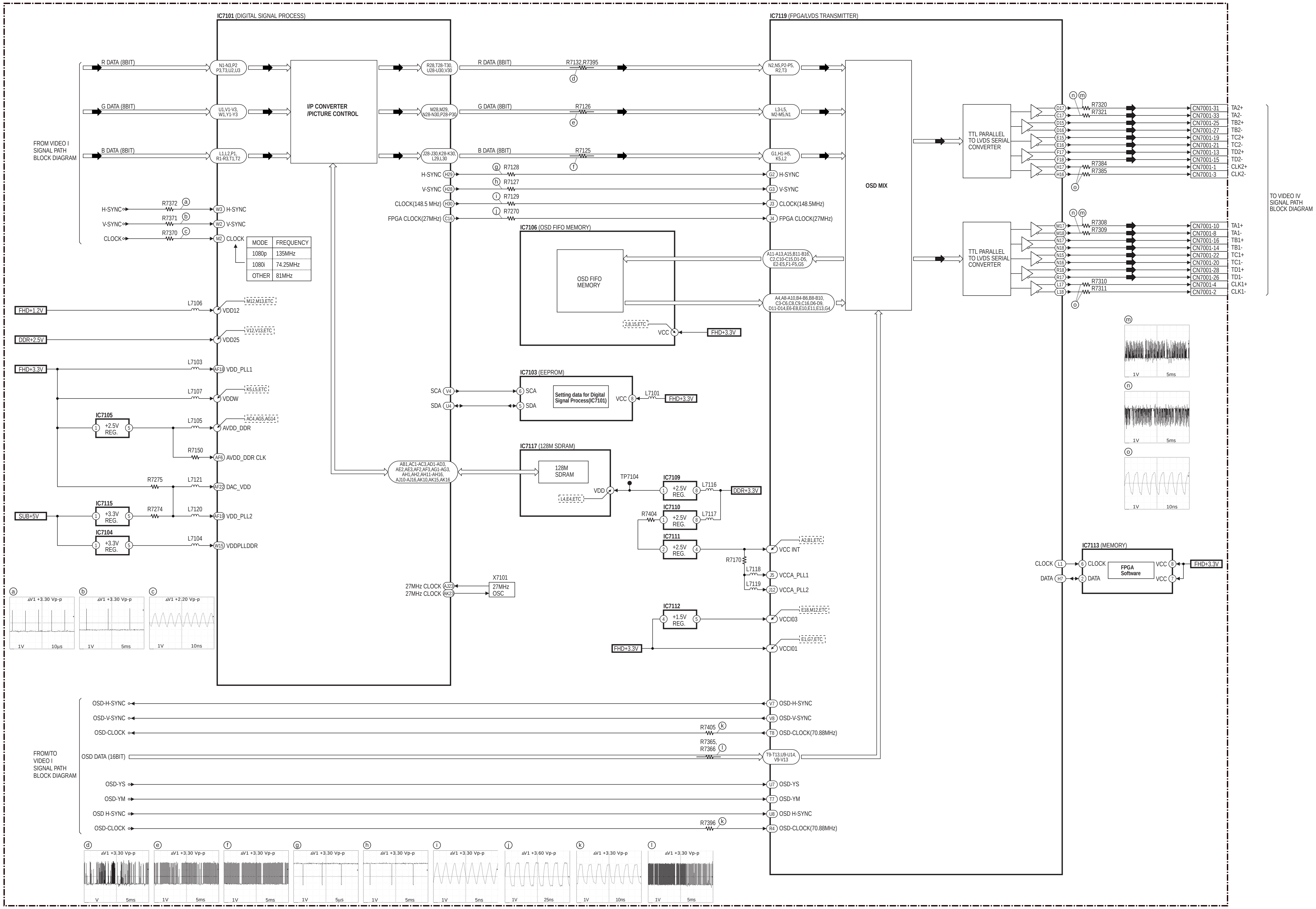
VIDEO SIGNAL PATH I BLOCK DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

VIDEO SIGNAL PATH II BLOCK DIAGRAM


VIDEO SIGNAL
AUDIO SIGNAL
MAIN P.C.B.
IC5501 (EEPROM)
VCC
I2C SERIAL CLOCK
I2C SERIAL DATA
WRITE PROTECT
MAIN+5V
IC5500 (EEPROM)
CN5501
+5V
TMDS DATA0(+)
TMDS DATA0(-)
TMDS DATA1(+)
TMDS DATA1(-)
TMDS DATA2(+)
TMDS DATA2(-)
TMDS CLOCK(+)
TMDS CLOCK(-)
HDMI-IN1
CN5500
HDMI-IN2
IC5503 (HDMI SW/EQUALIZER)
SW
EQUALIZER
BUFFER
2,11,ETC
VCC
MAIN2+3.3V
IC5511 (SW)
IC5512 (SW)
Q5508
Q5504
Q5505
IC5510 (HDMI INTERFACE AD CONVERTER)
FROM VIDEO I SIGNAL PATH BLOCK DIAGRAM
MAIN Y/V
MAIN PB/C
MAIN PR
PC H-SYNC
PC V-SYNC
Q5516
Q5515
Q5514
MATRIX
A/D CONVERTER
MUX
DATA PROCESSOR
24-33, 38-47, 52, 53, 55, 58
YUV DATA (24BIT)
H-SYNC
V-SYNC
CLOCK
R5646
R5645
R5636
TO VIDEO I SIGNAL PATH BLOCK DIAGRAM
TMDS DECODER
HDMI DECODER
YUV CONVERTER
MODE
FREQUENCY
480p
27MHz
720p /1080i
74.25MHz
1080p
148.5MHz
27MHz CLOCK
X5500
27MHz OSC
IC5504 (EEPROM)
MAIN+3.3V
ⓐ
ⓑ
ⓒ
1V
5μs
10ns
I2C SERIAL CLOCK
I2C SERIAL DATA
AUDIO DECODER
HDMI SERIAL DATA
HDMI LRCK
HDMI BCK
HDMI SPDIF
TO AUDIO BLOCK DIAGRAM
SD/HDMI P.C.B.
IC9802 (EEPROM)
CN9803
HDMI-IN3
IC9801 (EQUALIZER)
+3.3V
CN9804-4
CN9804-6
CN9804-3
CN9804-1
CN9804-9
CN9804-7
CN9804-10
CN9804-12
CN5503-4
CN5503-6
CN5503-3
CN5503-1
CN5503-9
CN5503-7
CN5503-10
CN5503-12
CN9804-25
CN9804-27
CN5503-25
CN5503-27
Q9804
CN9804-26
CN5503-26
(FROM IC6004 (6)) HDMI MUX SELECT(L)
(FRON IC6004 (106)) EDIT WP(H)
TVDD
AVDD
DVDDIO
PVDD
CVDD
DVDD
TP5052
TP5053
L5512
TP5060
TP5051
IC5506
+3.3V REG.
TP5040
TP5041
SUB+5V
TP5044
TP5055
L5515
TP5058
TP5059
IC5508
+1.8V REG.
TP5042
TP5043
L5521
SUB+3.3V
L5520
TP5056
TP5057
IC5509
TV MAIN ON DELAY (H)
FROM SYSTEM CONTROL BLOCK DIAGRAM

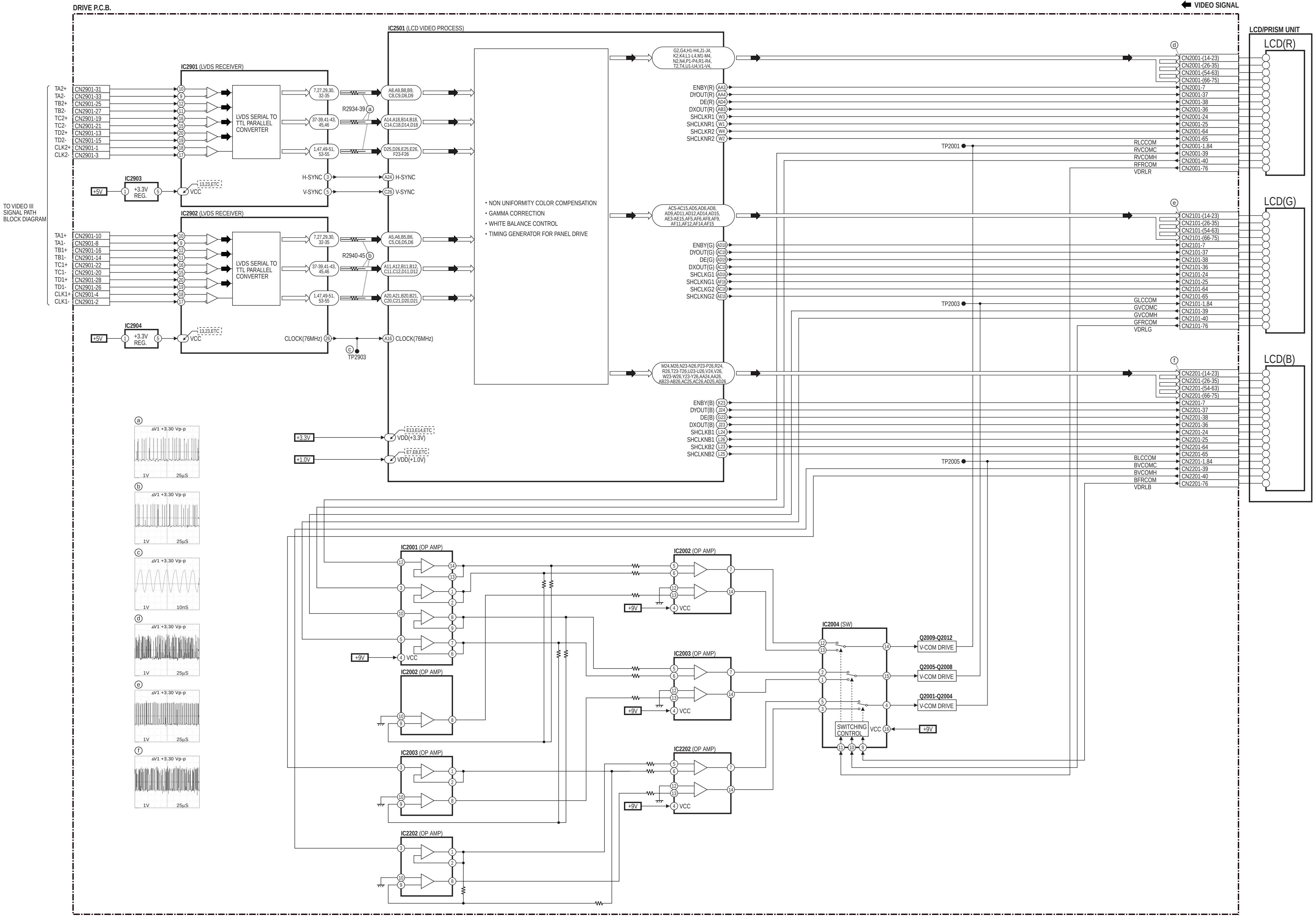
VIDEO SIGNAL PATH II BLOCK DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7 /PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

VIDEO SIGNAL PATH III BLOCK DIAGRAM


MAIN P.C.B.
VIDEO SIGNAL
IC7101 (DIGITAL SIGNAL PROCESS)
IC7119 (FPGA/LVDS TRANSMITTER)
FROM VIDEO I SIGNAL PATH BLOCK DIAGRAM
R DATA (8BIT)
G DATA (8BIT)
B DATA (8BIT)
N1-N3,P2 P3,T3,U2,U3
U1,V1-V3, W1,Y1-Y3
L1,L2,P1, R1-R3,T1,T2
I/P CONVERTER /PICTURE CONTROL
R28,T28-T30, U28-U30,V30
M28,M29, N28-N30,P28-P30
J28-J30,K28-K30, L29,L30
R7132,R7395
R7126
R7125
N2,N5,P2-P5, R2,T3
L3-L5, M2-M5,N1
G1,H1-H5, K5,L2
OSD MIX
H-SYNC H29 R7128 G2 H-SYNC
V-SYNC H28 R7127 G3 V-SYNC
CLOCK(148.5 MHz) H30 R7129 J3 CLOCK(148.5MHz)
FPGA CLOCK(27MHz) C16 R7270 J4 FPGA CLOCK(27MHz)
H-SYNC R7372 W3 H-SYNC
V-SYNC R7371 W2 V-SYNC
CLOCK R7370 M2 CLOCK
MODE | FREQUENCY
1080p | 135MHz
1080i | 74.25MHz
OTHER | 81MHz
FHD+1.2V L7106 M12,M13,ETC VDD12
DDR+2.5V V12,V13,ETC VDD25
FHD+3.3V L7103 AF18 VDD_PLL1
L7107 K5,L5,ETC VDDW
IC7105 +2.5V REG. L7105 AC4,AG5,AG14 AVDD_DDR
R7150 AF6 AVDD_DDR CLK
R7275 L7121 AF22 DAC_VDD
IC7115 SUB+5V +3.3V REG. R7274 L7120 AF19 VDD_PLL2
IC7104 +3.3V REG. L7104 W15 VDDPLLDDR
IC7106 (OSD FIFO MEMORY)
OSD FIFO MEMORY
A11-A13,A15,B11-B16, C2,C10-C15,D1-D5, E2-E5,F1-F5,G5
A4,A8-A10,B4-B6,B8-B10, C3-C6,C8,C9,C16,D6-D9, D11-D14,E6-E8,E10,E11,E13,G4
2,8,15,ETC VCC FHD+3.3V
IC7103 (EEPROM)
SCA V4 6 SCA
SDA U4 5 SDA
Setting data for Digital Signal Process(IC7101)
VCC 8 L7101 FHD+3.3V
IC7117 (128M SDRAM)
128M SDRAM
AB1,AC1-AC3,AD1-AD3, AE2,AE3,AF2,AF3,AG1-AG3, AH1,AH2,AH11-AH16, AJ10-AJ16,AK10,AK15,AK16
VDD L4,E4,ETC
TP7104
IC7109 +2.5V REG. L7116 DDR+3.3V
R7404 IC7110 +2.5V REG. L7117
IC7111 +2.5V REG.
R7170 A2,B1,ETC VCC INT
L7118 J5 VCCA_PLL1
L7119 J12 VCCA_PLL2
IC7112 +1.5V REG. E18,M12,ETC VCCI03
FHD+3.3V E1,G7,ETC VCCI01
X7101 27MHz OSC
27MHz CLOCK AJ21
27MHz CLOCK AK21
TTL PARALLEL TO LVDS SERIAL CONVERTER
D17 C17 D15 D16 E15 E16 F17 F18 H17 H16
R7320 R7321 R7384 R7385
CN7001-31 TA2+
CN7001-33 TA2-
CN7001-25 TB2+
CN7001-27 TB2-
CN7001-19 TC2+
CN7001-21 TC2-
CN7001-13 TD2+
CN7001-15 TD2-
CN7001-1 CLK2+
CN7001-3 CLK2-
M17 M18 N17 N18 N15 N16 R18 R17 L17 L18
R7308 R7309 R7310 R7311
CN7001-10 TA1+
CN7001-8 TA1-
CN7001-16 TB1+
CN7001-14 TB1-
CN7001-22 TC1+
CN7001-20 TC1-
CN7001-28 TD1+
CN7001-26 TD1-
CN7001-4 CLK1+
CN7001-2 CLK1-
TO VIDEO IV SIGNAL PATH BLOCK DIAGRAM
IC7113 (MEMORY)
CLOCK L1 6 CLOCK
DATA H7 2 DATA
FPGA Software
VCC 8 FHD+3.3V
VCC 7
FROM/TO VIDEO I SIGNAL PATH BLOCK DIAGRAM
OSD-H-SYNC V7 OSD-H-SYNC
OSD-V-SYNC V8 OSD-V-SYNC
OSD-CLOCK R7405 T8 OSD-CLOCK(70.88MHz)
OSD DATA (16BIT) R7365, R7366 T9-T13,U9-U14, V9-V13
OSD-YS U7 OSD-YS
OSD-YM T7 OSD-YM
OSD H-SYNC U8 OSD H-SYNC
OSD-CLOCK R7396 R4 OSD-CLOCK(70.88MHz)
a ΔV1 +3.30 Vp-p 1V 10µs
b ΔV1 +3.30 Vp-p 1V 5ms
c ΔV1 +2.20 Vp-p 1V 10ns
d ΔV1 +3.30 Vp-p V 5ms
e ΔV1 +3.30 Vp-p 1V 5ms
f ΔV1 +3.30 Vp-p 1V 5ms
g ΔV1 +3.30 Vp-p 1V 5µs
h ΔV1 +3.30 Vp-p 1V 5ms
i ΔV1 +3.30 Vp-p 1V 5ns
j ΔV1 +3.60 Vp-p 1V 25ns
k ΔV1 +3.30 Vp-p 1V 10ns
l ΔV1 +3.30 Vp-p 1V 5ms
m 1V 5ms
n 1V 5ms
o 1V 10ns

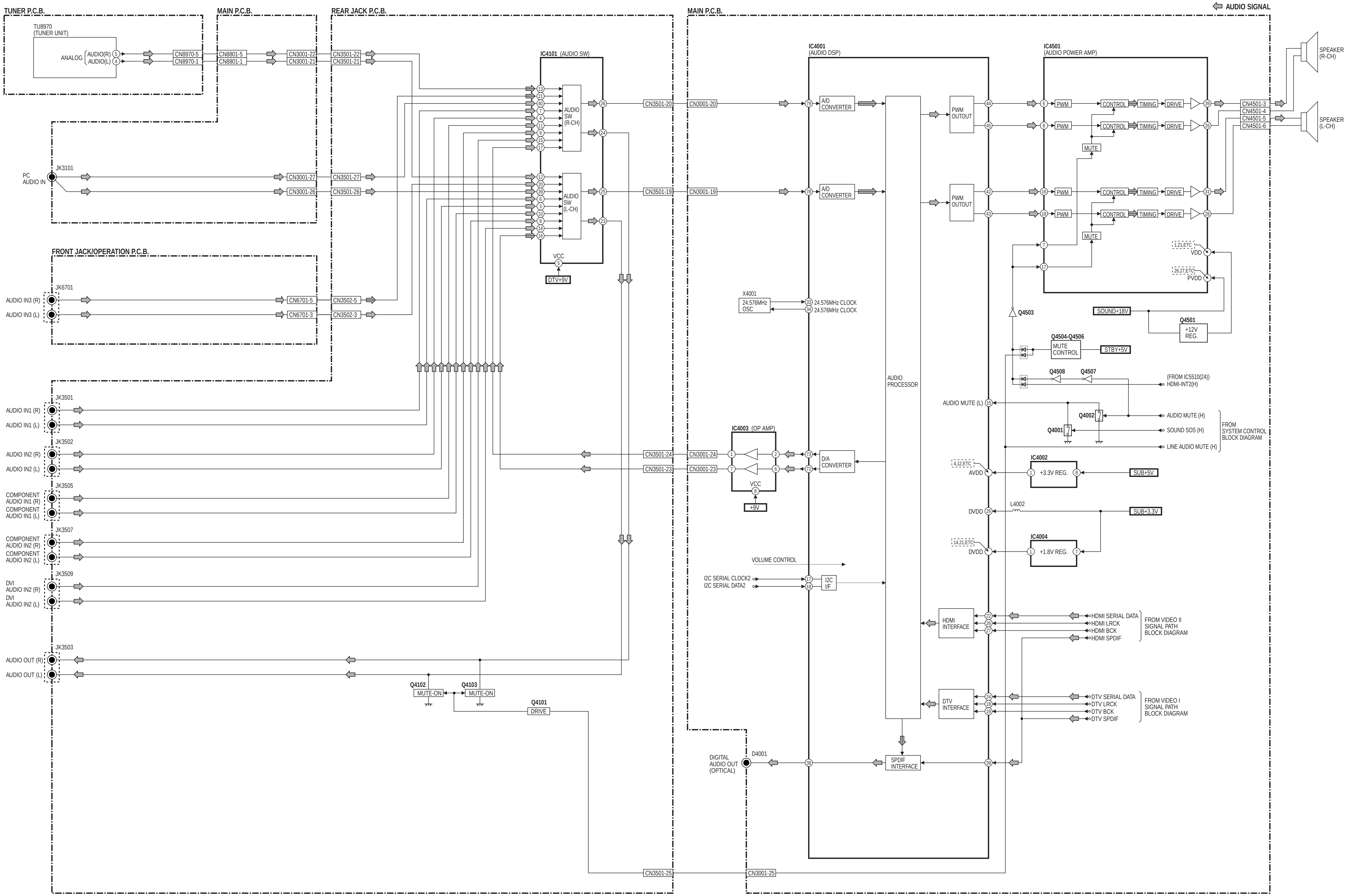
VIDEO SIGNAL PATH III BLOCK DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

VIDEO SIGNAL PATH IV BLOCK DIAGRAM


DRIVE P.C.B.
VIDEO SIGNAL
LCD/PRISM UNIT
LCD(R)
LCD(G)
LCD(B)
IC2501 (LCD VIDEO PROCESS)
IC2901 (LVDS RECEIVER)
IC2902 (LVDS RECEIVER)
LVDS SERIAL TO TTL PARALLEL CONVERTER
IC2903
IC2904
+3.3V REG.
+5V
VCC
13,23,ETC.
TO VIDEO III SIGNAL PATH BLOCK DIAGRAM
TA2+ TA2- TB2+ TB2- TC2+ TC2- TD2+ TD2- CLK2+ CLK2-
CN2901-31 CN2901-33 CN2901-25 CN2901-27 CN2901-19 CN2901-21 CN2901-13 CN2901-15 CN2901-1 CN2901-3
TA1+ TA1- TB1+ TB1- TC1+ TC1- TD1+ TD1- CLK1+ CLK1-
CN2901-10 CN2901-8 CN2901-16 CN2901-14 CN2901-22 CN2901-20 CN2901-28 CN2901-26 CN2901-4 CN2901-2
R2934-39
R2940-45
H-SYNC
V-SYNC
CLOCK(76MHz)
TP2903
• NON UNIFORMITY COLOR COMPENSATION
• GAMMA CORRECTION
• WHITE BALANCE CONTROL
• TIMING GENERATOR FOR PANEL DRIVE
VDD(+3.3V)
VDD(+1.0V)
+3.3V
+1.0V
ENBY(R) DYOUT(R) DE(R) DXOUT(R) SHCLKR1 SHCLKNR1 SHCLKR2 SHCLKNR2
ENBY(G) DYOUT(G) DE(G) DXOUT(G) SHCLKG1 SHCLKNG1 SHCLKG2 SHCLKNG2
ENBY(B) DYOUT(B) DE(B) DXOUT(B) SHCLKB1 SHCLKNB1 SHCLKB2 SHCLKNB2
TP2001
TP2003
TP2005
RLCCOM RVCOMC RVCOMH RFRCOM VDRLR
GLCCOM GVCOMC GVCOMH GFRCOM VDRLG
BLCCOM BVCOMC BVCOMH BFRCOM VDRLB
CN2001-(14-23) CN2001-(26-35) CN2001-(54-63) CN2001-(66-75)
CN2101-(14-23) CN2101-(26-35) CN2101-(54-63) CN2101-(66-75)
CN2201-(14-23) CN2201-(26-35) CN2201-(54-63) CN2201-(66-75)
IC2001 (OP AMP)
IC2002 (OP AMP)
IC2003 (OP AMP)
IC2202 (OP AMP)
IC2004 (SW)
+9V
SWITCHING CONTROL
Q2009-Q2012 V-COM DRIVE
Q2005-Q2008 V-COM DRIVE
Q2001-Q2004 V-COM DRIVE
a b c d e f
ΔV1 +3.30 Vp-p
1V 25μS
1V 10nS

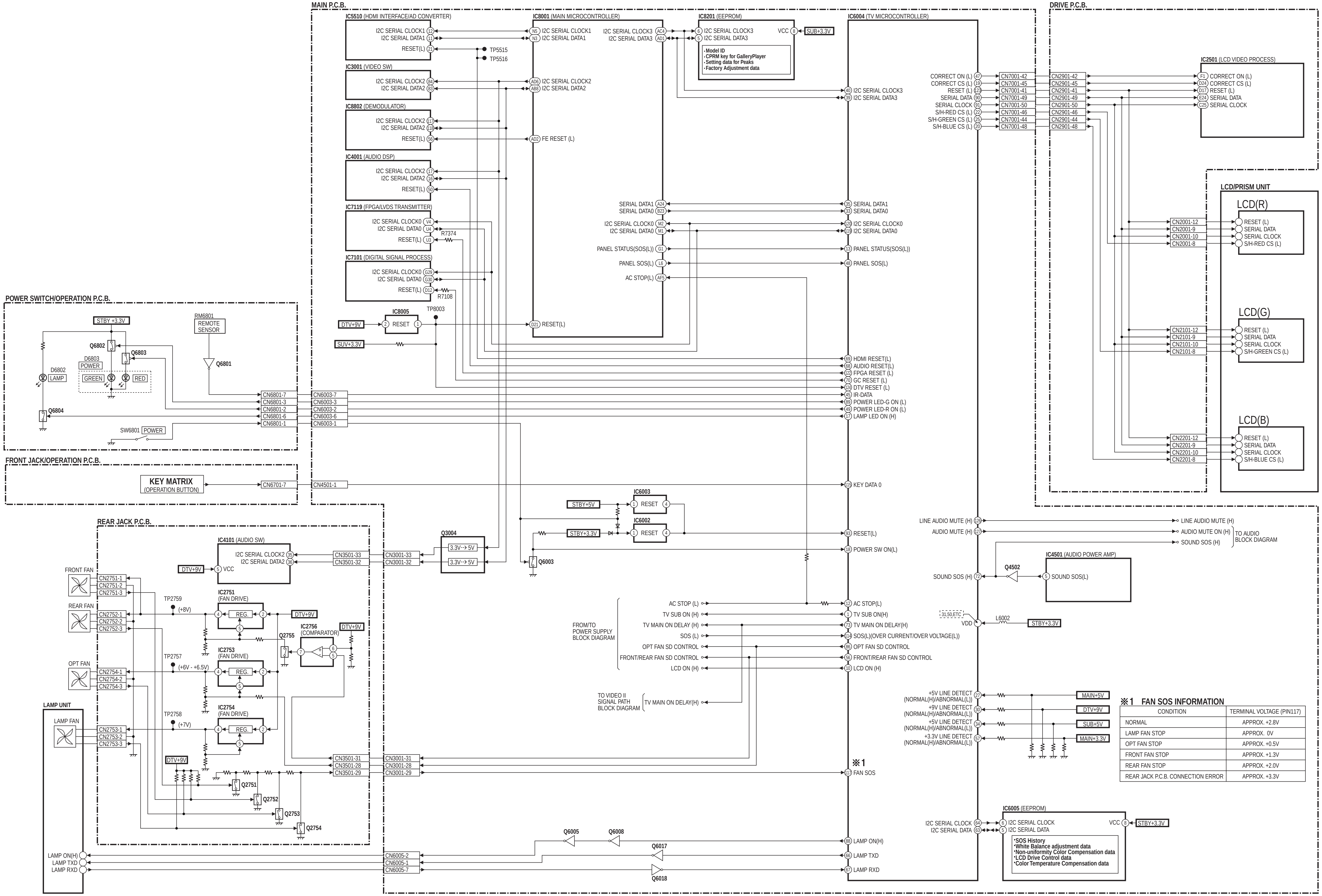
VIDEO SIGNAL PATH IV BLOCK DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

AUDIO SIGNAL PATH BLOCK DIAGRAM


AUDIO SIGNAL
TUNER P.C.B.
TU8970
(TUNER UNIT)
ANALOG
AUDIO(R)
AUDIO(L)
CN8970-5
CN8970-1
MAIN P.C.B.
CN8801-5
CN8801-1
REAR JACK P.C.B.
CN3001-22
CN3001-21
CN3501-22
CN3501-21
JK3101
PC
AUDIO IN
CN3001-27
CN3001-26
CN3501-27
CN3501-26
FRONT JACK/OPERATION P.C.B.
JK6701
AUDIO IN3 (R)
AUDIO IN3 (L)
CN6701-5
CN6701-3
CN3502-5
CN3502-3
IC4101 (AUDIO SW)
AUDIO SW (R-CH)
AUDIO SW (L-CH)
VCC
DTV+9V
CN3501-20
CN3001-20
CN3501-19
CN3001-19
JK3501
AUDIO IN1 (R)
AUDIO IN1 (L)
JK3502
AUDIO IN2 (R)
AUDIO IN2 (L)
JK3505
COMPONENT AUDIO IN1 (R)
COMPONENT AUDIO IN1 (L)
JK3507
COMPONENT AUDIO IN2 (R)
COMPONENT AUDIO IN2 (L)
JK3509
DVI AUDIO IN2 (R)
DVI AUDIO IN2 (L)
JK3503
AUDIO OUT (R)
AUDIO OUT (L)
Q4102
MUTE-ON
Q4103
MUTE-ON
Q4101
DRIVE
CN3501-24
CN3001-24
CN3501-23
CN3001-23
CN3501-25
CN3001-25
MAIN P.C.B.
IC4003 (OP AMP)
VCC
+9V
IC4001
(AUDIO DSP)
A/D CONVERTER
A/D CONVERTER
D/A CONVERTER
PWM OUTOUT
PWM OUTOUT
AUDIO PROCESSOR
X4001
24.576MHz OSC
24.576MHz CLOCK
24.576MHz CLOCK
AUDIO MUTE (L)
AVDD
4,12,ETC
DVDD
DVDD
14,21,ETC
L4002
IC4002
+3.3V REG.
SUB+5V
SUB+3.3V
IC4004
+1.8V REG.
VOLUME CONTROL
I2C SERIAL CLOCK2
I2C SERIAL DATA2
I2C I/F
HDMI INTERFACE
HDMI SERIAL DATA
HDMI LRCK
HDMI BCK
HDMI SPDIF
FROM VIDEO II SIGNAL PATH BLOCK DIAGRAM
DTV INTERFACE
DTV SERIAL DATA
DTV LRCK
DTV BCK
DTV SPDIF
FROM VIDEO I SIGNAL PATH BLOCK DIAGRAM
SPDIF INTERFACE
D4001
DIGITAL AUDIO OUT (OPTICAL)
IC4501
(AUDIO POWER AMP)
PWM
CONTROL
TIMING
DRIVE
MUTE
1,21,ETC
VDD
26,27,ETC
PVDD
SOUND+18V
Q4501
+12V REG.
Q4503
Q4504-Q4506
MUTE CONTROL
STBY+5V
Q4508
Q4507
(FROM IC5510(24))
HDMI-INT2(H)
Q4002
Q4001
AUDIO MUTE (H)
SOUND SOS (H)
LINE AUDIO MUTE (H)
FROM SYSTEM CONTROL BLOCK DIAGRAM
CN4501-3
CN4501-4
CN4501-5
CN4501-6
SPEAKER (R-CH)
SPEAKER (L-CH)

AUDIO SIGNAL PATH BLOCK DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

SYSTEM CONTROL BLOCK DIAGRAM


MAIN P.C.B.
IC5510 (HDMI INTERFACE/AD CONVERTER)
I2C SERIAL CLOCK1 12
I2C SERIAL DATA1 11
RESET(L) 21
TP5515
TP5516
IC3001 (VIDEO SW)
I2C SERIAL CLOCK2 84
I2C SERIAL DATA2 83
IC8802 (DEMODULATOR)
I2C SERIAL CLOCK2 117
I2C SERIAL DATA2 118
RESET(L) 56
IC4001 (AUDIO DSP)
I2C SERIAL CLOCK2 17
I2C SERIAL DATA2 16
RESET(L) 50
IC7119 (FPGA/LVDS TRANSMITTER)
I2C SERIAL CLOCK0 V4
I2C SERIAL DATA0 U4
RESET(L) U3
R7374
IC7101 (DIGITAL SIGNAL PROCESS)
I2C SERIAL CLOCK0 G29
I2C SERIAL DATA0 G30
RESET(L) D12
R7108
IC8005
DTV+9V
2 RESET 1
TP8003
SUV+3.3V
IC8001 (MAIN MICROCONTROLLER)
N5 I2C SERIAL CLOCK1
N3 I2C SERIAL DATA1
I2C SERIAL CLOCK3 AC4
I2C SERIAL DATA3 AD1
AD6 I2C SERIAL CLOCK2
AB8 I2C SERIAL DATA2
AD2 FE RESET (L)
SERIAL DATA1 A24
SERIAL DATA0 B23
I2C SERIAL CLOCK0 M2
I2C SERIAL DATA0 M1
PANEL STATUS(SOS(L)) G1
PANEL SOS(L) L6
AC STOP(L) AF5
D21 RESET(L)
IC8201 (EEPROM)
6 I2C SERIAL CLOCK3
5 I2C SERIAL DATA3
VCC 8
SUB+3.3V
·Model ID
·CPRM key for GalleryPlayer
·Setting data for Peaks
·Factory Adjustment data
IC6004 (TV MICROCONTROLLER)
40 I2C SERIAL CLOCK3
39 I2C SERIAL DATA3
35 SERIAL DATA1
33 SERIAL DATA0
120 I2C SERIAL CLOCK0
119 I2C SERIAL DATA0
13 PANEL STATUS(SOS(L))
48 PANEL SOS(L)
69 HDMI RESET(L)
68 AUDIO RESET(L)
122 FPGA RESET (L)
70 GC RESET (L)
124 DTV RESET (L)
45 IR-DATA
89 POWER LED-G ON (L)
49 POWER LED-R ON (L)
17 LAMP LED ON (H)
115 KEY DATA 0
93 RESET(L)
18 POWER SW ON(L)
12 AC STOP(L)
1 TV SUB ON(H)
73 TV MAIN ON DELAY(H)
114 SOS(L)(OVER CURRENT/OVER VOLTAGE(L))
86 OPT FAN SD CONTROL
56 FRONT/REAR FAN SD CONTROL
10 LCD ON (H)
※1
117 FAN SOS
88 LAMP ON(H)
66 LAMP TXD
67 LAMP RXD
CORRECT ON (L) 47
CORRECT CS (L) 19
RESET (L) 123
SERIAL DATA 90
SERIAL CLOCK 91
S/H-RED CS (L) 22
S/H-GREEN CS (L) 25
S/H-BLUE CS (L) 20
CN7001-42
CN7001-45
CN7001-41
CN7001-49
CN7001-50
CN7001-46
CN7001-44
CN7001-48
LINE AUDIO MUTE (H) 126
AUDIO MUTE (H) 127
SOUND SOS (H) 72
31,50,ETC
VDD
L6002
STBY+3.3V
+5V LINE DETECT (NORMAL(H)/ABNORMAL(L)) 27
+9V LINE DETECT (NORMAL(H)/ABNORMAL(L)) 30
+5V LINE DETECT (NORMAL(H)/ABNORMAL(L)) 34
+3.3V LINE DETECT (NORMAL(H)/ABNORMAL(L)) 57
MAIN+5V
DTV+9V
SUB+5V
MAIN+3.3V
I2C SERIAL CLOCK 64
I2C SERIAL DATA 63
IC6005 (EEPROM)
6 I2C SERIAL CLOCK
5 I2C SERIAL DATA
VCC 8
STBY+3.3V
·SOS History
·White Balance adjustment data
·Non-uniformity Color Compensation data
·LCD Drive Control data
·Color Temperature Compensation data
IC4501 (AUDIO POWER AMP)
5 SOUND SOS(L)
Q4502
LINE AUDIO MUTE (H)
AUDIO MUTE ON (H)
SOUND SOS (H)
TO AUDIO BLOCK DIAGRAM
IC6003
STBY+5V
1 RESET 4
IC6002
STBY+3.3V
1 RESET 4
Q3004
3.3V→5V
3.3V→5V
Q6003
CN3001-33
CN3001-32
CN3001-31
CN3001-28
CN3001-29
CN6005-2
CN6005-1
CN6005-7
FROM/TO POWER SUPPLY BLOCK DIAGRAM
AC STOP (L)
TV SUB ON (H)
TV MAIN ON DELAY (H)
SOS (L)
OPT FAN SD CONTROL
FRONT/REAR FAN SD CONTROL
LCD ON (H)
TO VIDEO II SIGNAL PATH BLOCK DIAGRAM
TV MAIN ON DELAY(H)
Q6005
Q6008
Q6017
Q6018
DRIVE P.C.B.
CN2901-42
CN2901-45
CN2901-41
CN2901-49
CN2901-50
CN2901-46
CN2901-44
CN2901-48
IC2501 (LCD VIDEO PROCESS)
F1 CORRECT ON (L)
D24 CORRECT CS (L)
D17 RESET (L)
E24 SERIAL DATA
C25 SERIAL CLOCK
LCD/PRISM UNIT
LCD(R)
CN2001-12
CN2001-9
CN2001-10
CN2001-8
RESET (L)
SERIAL DATA
SERIAL CLOCK
S/H-RED CS (L)
LCD(G)
CN2101-12
CN2101-9
CN2101-10
CN2101-8
RESET (L)
SERIAL DATA
SERIAL CLOCK
S/H-GREEN CS (L)
LCD(B)
CN2201-12
CN2201-9
CN2201-10
CN2201-8
RESET (L)
SERIAL DATA
SERIAL CLOCK
S/H-BLUE CS (L)
POWER SWITCH/OPERATION P.C.B.
STBY +3.3V
RM6801
REMOTE SENSOR
Q6801
Q6802
Q6803
D6803
POWER
D6802
LAMP
GREEN
RED
Q6804
SW6801
POWER
CN6801-7
CN6801-3
CN6801-2
CN6801-6
CN6801-1
CN6003-7
CN6003-3
CN6003-2
CN6003-6
CN6003-1
FRONT JACK/OPERATION P.C.B.
KEY MATRIX
(OPERATION BUTTON)
CN6701-7
CN4501-1
REAR JACK P.C.B.
IC4101 (AUDIO SW)
I2C SERIAL CLOCK2 35
I2C SERIAL DATA2 36
DTV+9V
5 VCC
CN3501-33
CN3501-32
FRONT FAN
CN2751-1
CN2751-2
CN2751-3
REAR FAN
CN2752-1
CN2752-2
CN2752-3
OPT FAN
CN2754-1
CN2754-2
CN2754-3
TP2759
(+8V)
IC2751
(FAN DRIVE)
REG.
DTV+9V
IC2756
(COMPARATOR)
DTV+9V
Q2755
TP2757
(+6V - +6.5V)
IC2753
(FAN DRIVE)
REG.
TP2758
(+7V)
IC2754
(FAN DRIVE)
REG.
DTV+9V
Q2751
Q2752
Q2753
Q2754
CN3501-31
CN3501-28
CN3501-29
LAMP UNIT
LAMP FAN
CN2753-1
CN2753-2
CN2753-3
LAMP ON(H)
LAMP TXD
LAMP RXD

※1 FAN SOS INFORMATION

CONDITION	TERMINAL VOLTAGE (PIN117)
NORMAL	APPROX. +2.8V
LAMP FAN STOP	APPROX. 0V
OPT FAN STOP	APPROX. +0.5V
FRONT FAN STOP	APPROX. +1.3V
REAR FAN STOP	APPROX. +2.0V
REAR JACK P.C.B. CONNECTION ERROR	APPROX. +3.3V

SYSTEM CONTROL BLOCK DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7 /PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

9 Schematic Diagrams

9.1. SCHEMATIC DIAGRAM & CIRCUIT BOARD LAYOUT NOTES

1. **Important safety notice**
   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components. Use only the specified parts.

2. Do not use the part number shown on this drawing for ordering.
   The correct part number and part value is shown in the parts list, and may be slightly different or amended since this drawing was prepared.

3. Use only original replacement parts:
   To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Parts different in shape or size may be used.
   However, only interchangeable parts will be supplied as service replacement parts.

5. Test point information
   ● : Test point with a jumper wire across a hole in P.C.B.
   ○ : Test point with no test pin.

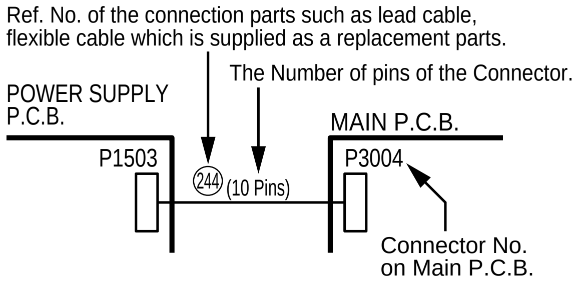
Schematic Diagram Notes

1. Indication for Zener Voltage of Zener Diodes
   The Zener Voltage of Zener Diodes are indicated as such on Schematic Diagrams.

   Example:
   (6.2V)......Zener Voltage

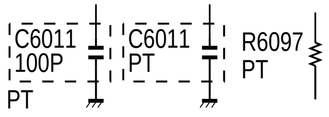
2. How to identify Connectors
   Each connector is labeled with a Connector No. and Pin No. Indicating what it is connected to,
   in other words, its counter part.
   Use the interconnection schematic diagram to find the connection between associated connectors.

   Example:
   The connections between P.C.B.s are shown below.


Ref. No. of the connection parts such as lead cable, flexible cable which is supplied as a replacement parts.
The Number of pins of the Connector.
POWER SUPPLY P.C.B.
MAIN P.C.B.
P1503
244
(10 Pins)
P3004
Connector No. on Main P.C.B.

3. Parts marked "PT" are not used in any models included in this service model.

Example:


C6011
100P
PT
C6011
PT
R6097
PT

4. Jumper wires are used for WA10, WA5 etc and these are not supplied as replacement parts.

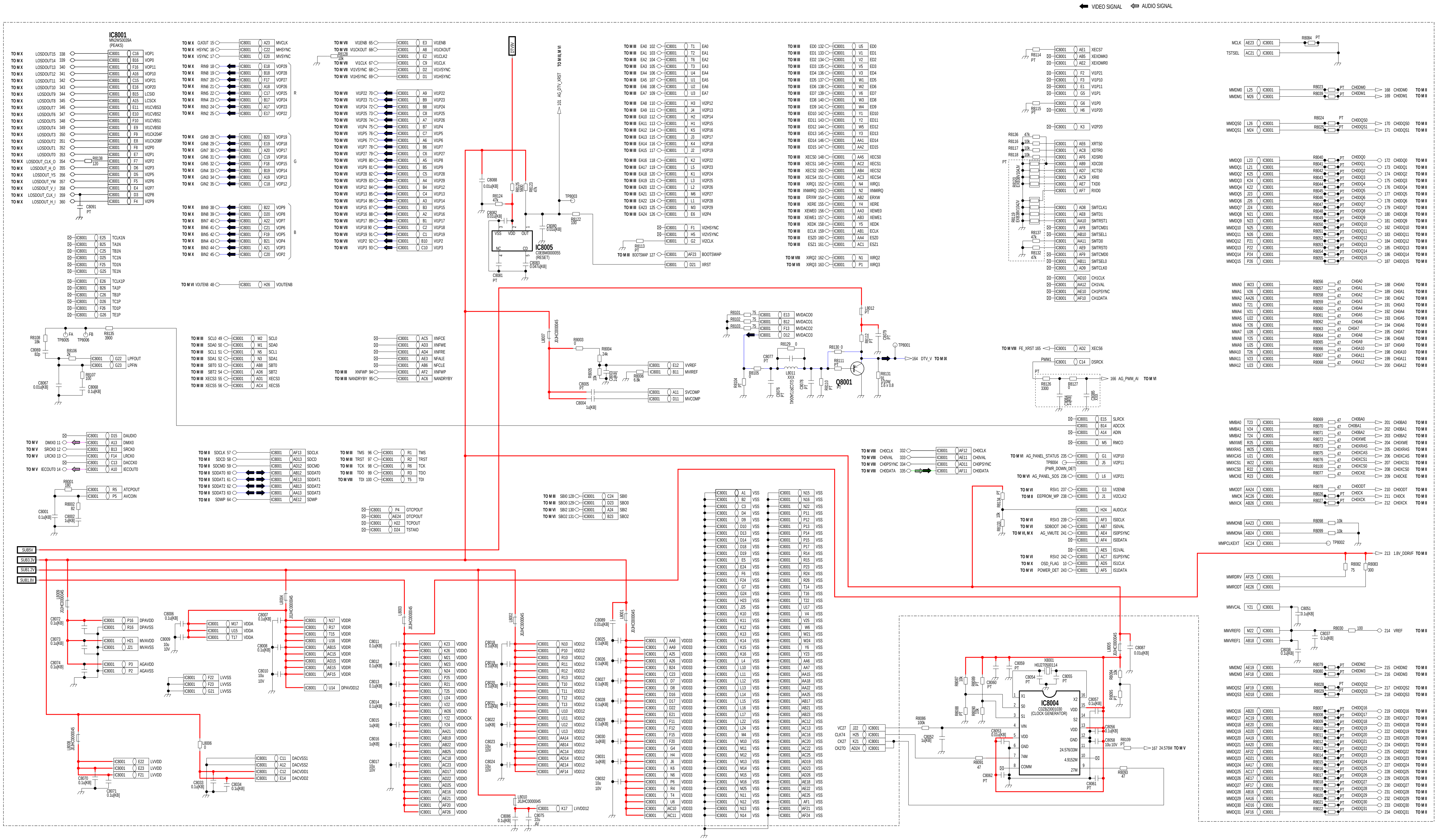
Circuit Board Layout Note

Circuit Board Layout shows components installed for various models.
For proper parts content for the model you are servicing, please refer to the schematic diagram and parts list.

NOTE:
Circuit Board Layout includes components which are not used.

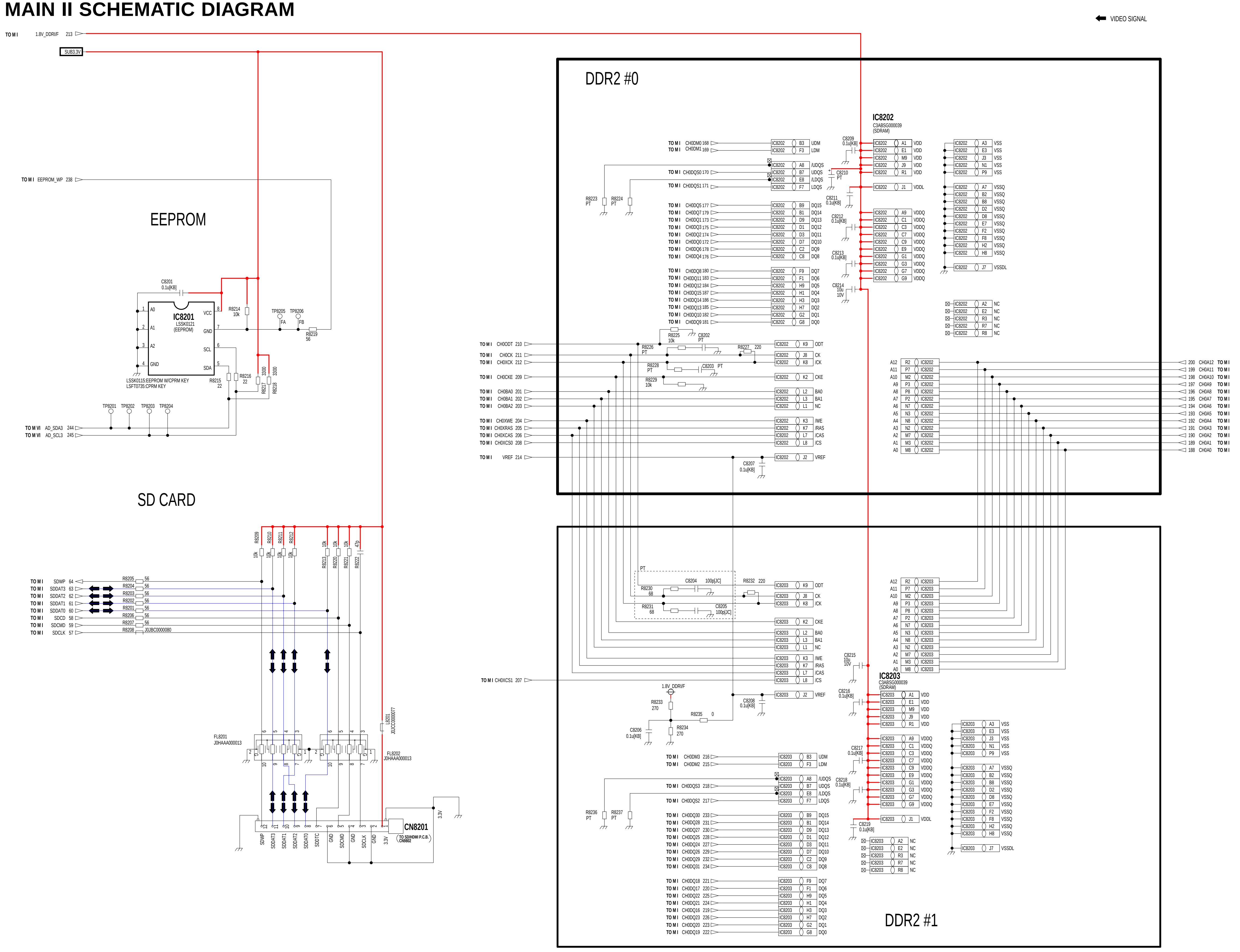
9.2. MAIN SCHEMATIC DIAGRAMS

MAIN I SCHEMATIC DIAGRAM


VIDEO SIGNAL
AUDIO SIGNAL
IC8001
MN2WS0039A
(PEAKS)
IC8005
(RESET)
Q8001
IC8004
(CLOCK GENERATOR)
X8001
SUB5V
SUB3.3V
SUB1.2V
SUB1.8V

MAIN I SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

MAIN II SCHEMATIC DIAGRAM

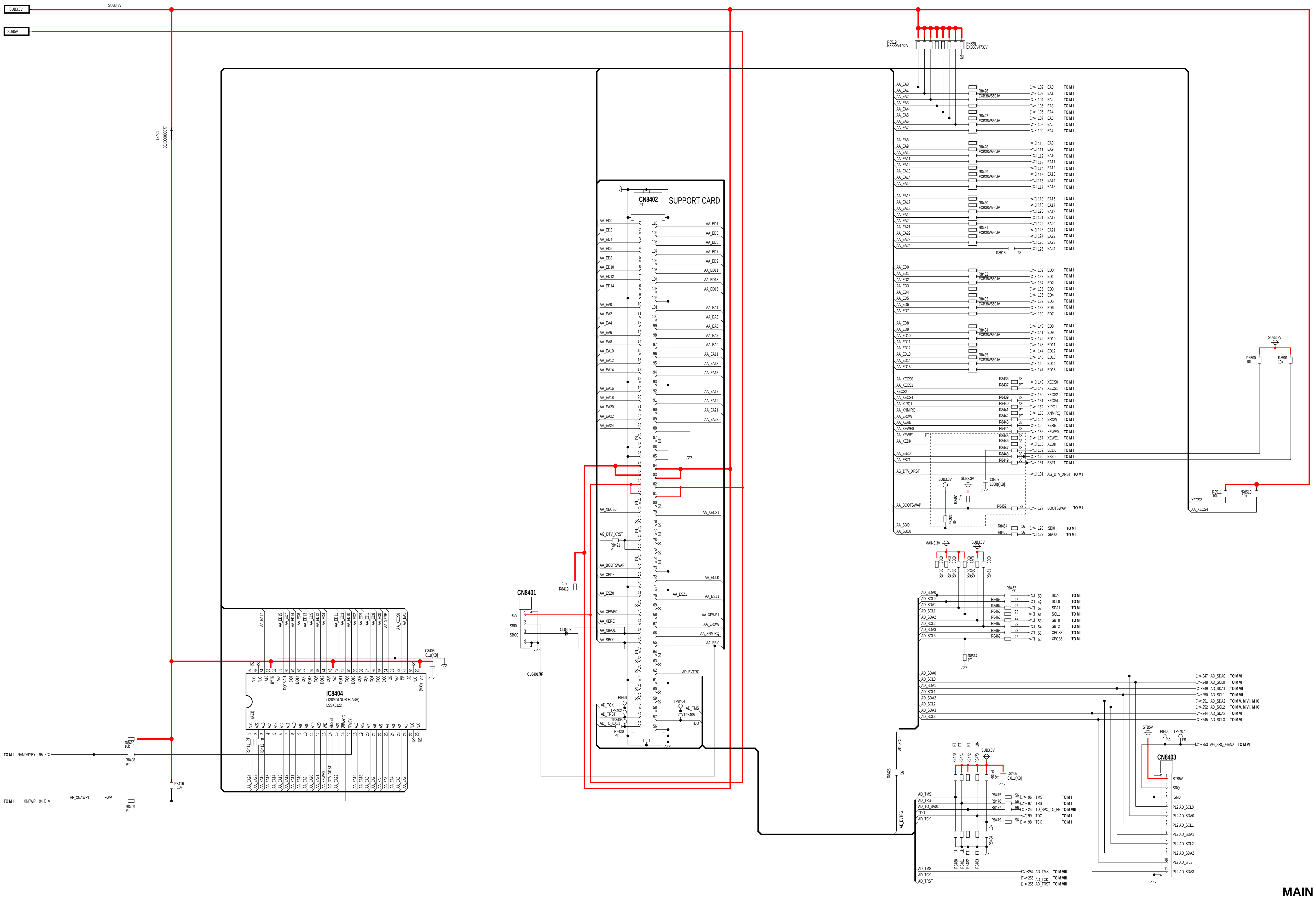

VIDEO SIGNAL
TO M I 1.8V_DDRIF 213
SUB3.3V
TO M I EEPROM_WP 238
EEPROM
IC8201
LSSK0121
(EEPROM)
C8201
0.1u[KB]
A0
A1
A2
GND
VCC
GND
SCL
SDA
R8214
10k
TP8205
TP8206
R8215
56
R8216
22
R8217
3300
R8218
3300
LSSK0115:EEPROM W/CPRM KEY
LSFT0735:CPRM KEY
TP8201 TP8202 TP8203 TP8204
TO M VI AD_SDA3 244
TO M VI AD_SCL3 245
SD CARD
TO M I SDWP 64
TO M I SDDAT3 63
TO M I SDDAT2 62
TO M I SDDAT1 61
TO M I SDDAT0 60
TO M I SDCD 58
TO M I SDCMD 59
TO M I SDCLK 57
FL8201
J0HAAA000013
FL8202
J0HAAA000013
L8201
J0JCC0000077
CN8201
(TO SD/HDMI P.C.B. CN8802)
SDWP SDDAT3 SDDAT2 SDDAT1 SDDAT0 SDCD GND SDCMD GND SDCLK GND 3.3V
DDR2 #0
IC8202
C3ABSG000039
(SDRAM)
TO M I CH0DDT 210
TO M I CH0CK 211
TO M I CH0XCK 212
TO M I CH0CKE 209
TO M I CH0BA0 201
TO M I CH0BA1 202
TO M I CH0BA2 203
TO M I CH0XWE 204
TO M I CH0XRAS 205
TO M I CH0XCAS 206
TO M I CH0XCS0 208
TO M I VREF 214
TO M I CH0XCS1 207
DDR2 #1
IC8203
C3ABSG000039
(SDRAM)
1.8V_DDRIF

MAIN II SCHEMATIC DIAGRAM

PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7

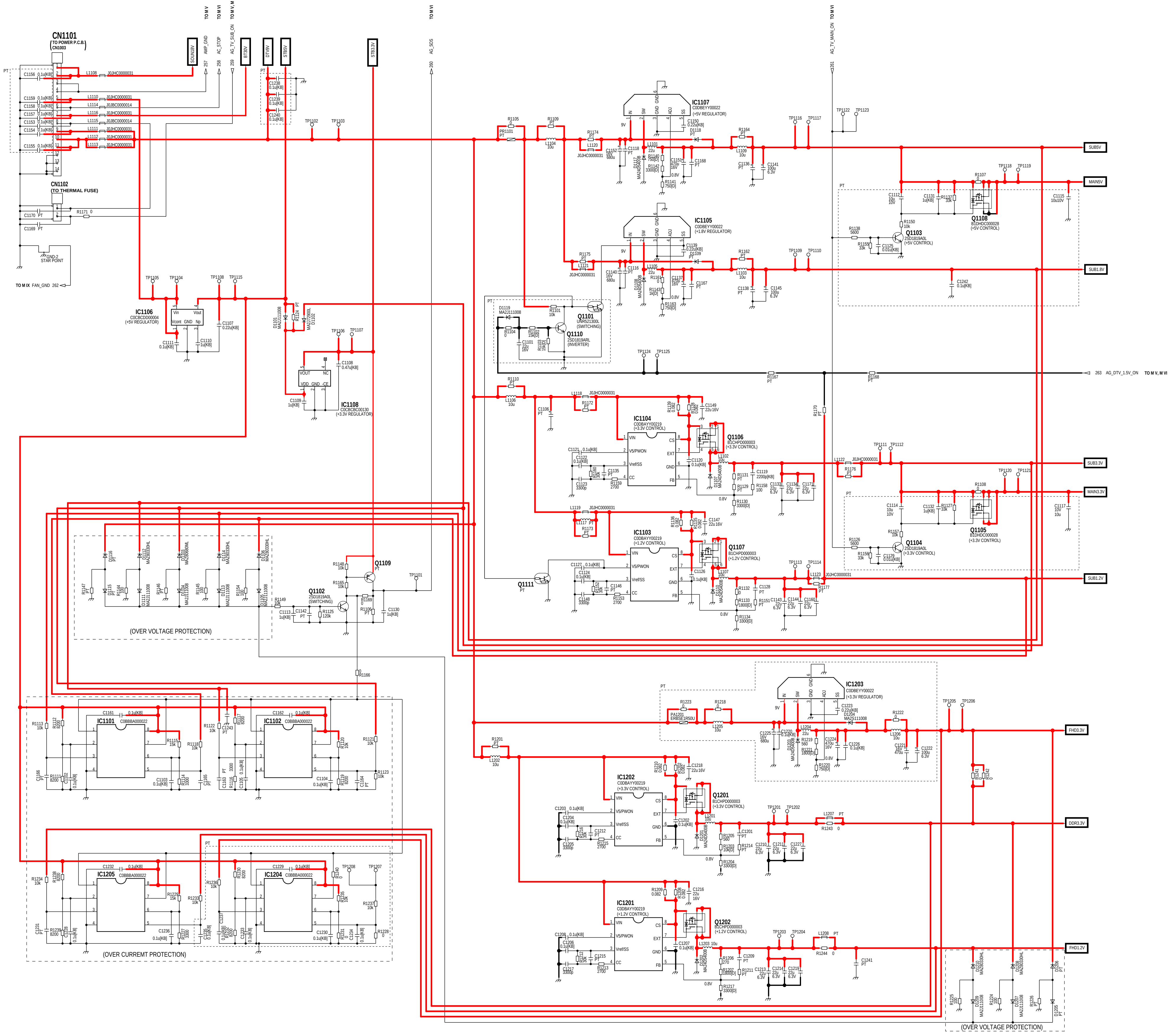
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

MAIN III SCHEMATIC DIAGRAM


SUB3.3V
SUB5V
L8401
CN8402
SUPPORT CARD
CN8401
IC8404
(128Mbit NOR FLASH)
LSSK0122
CN8403
R8426 EXB38V560JV
R8427 EXB38V560JV
R8428 EXB38V560JV
R8429 EXB38V560JV
R8430 EXB38V560JV
R8431 EXB38V560JV
R8432 EXB38V560JV
R8433 EXB38V560JV
R8434 EXB38V560JV
R8435 EXB38V560JV
R8519 EXB38V473JV
R8520 EXB38V473JV
C8405 0.1μ(KB)
C8406 0.01μ(KB)
C8407 1000p(KB)
TO M I
TO M VI
TO M VIII
NANDRYBY
XNFWP
AF_XNAWP1
FWP
TP8401
TP8402
TP8403
TP8404
TP8405
TP8406
TP8407
STBSV
SRQ
GND
MAIN3.3V

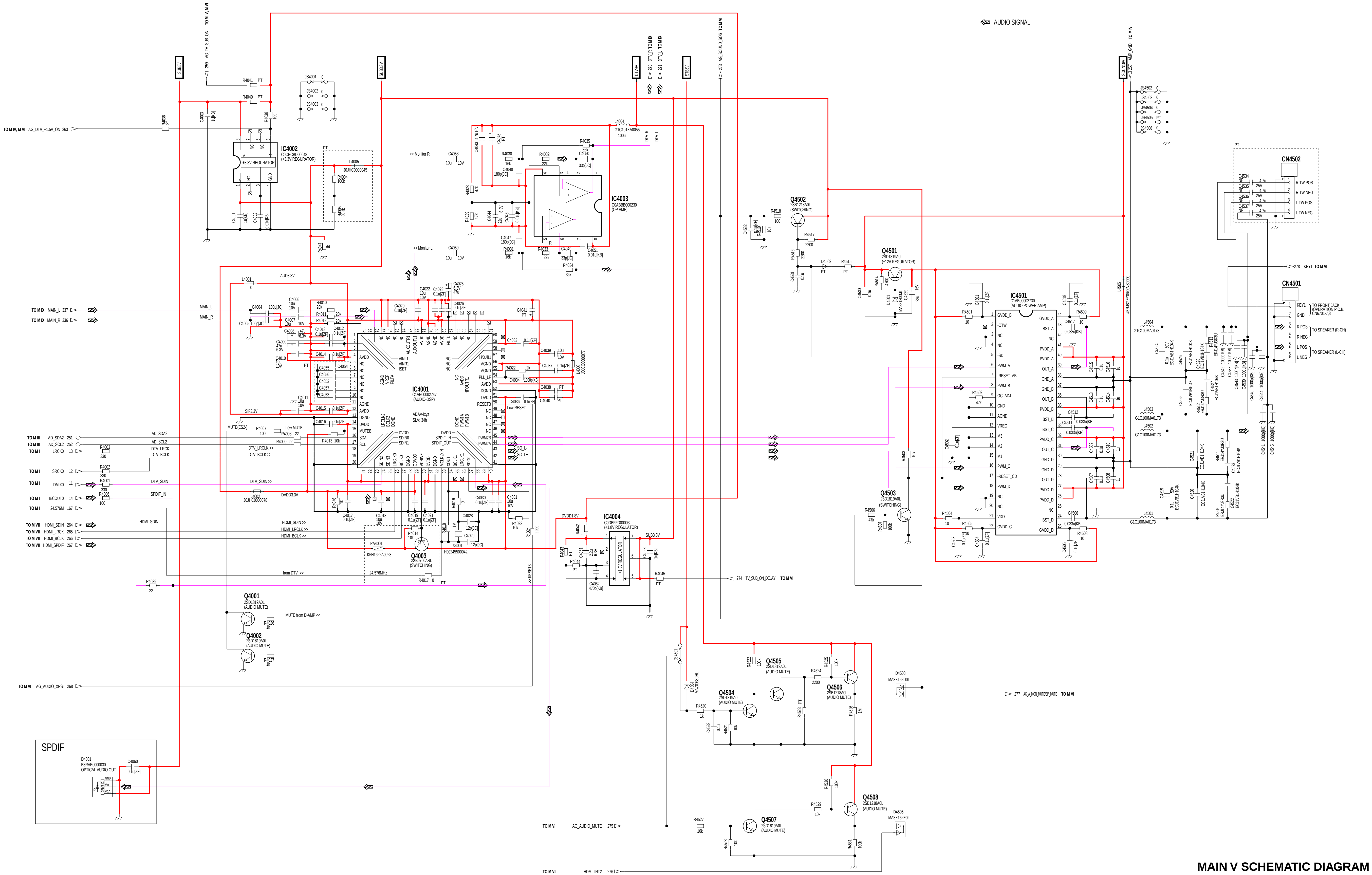
MAIN III SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

MAIN IV SCHEMATIC DIAGRAM


CN1101
(TO POWER P.C.B.)
(CN1003)
CN1102
(TO THERMAL FUSE)
GND-2
STAR POINT
TO M IX FAN_GND 262
TO M V
TO M VI
TO M V, M VI
SOUND5V
AMP_GND
AC_STOP
AG_TV_SUB_ON
ST30V
ST45V
ST8SV
STB3.3V
AG_SOS
AG_TV_MAIN_ON
IC1107
C0DBEYY00022
(+5V REGULATOR)
IC1105
C0DBEYY00022
(+1.8V REGULATOR)
IC1106
C0CBCDC00004
(+5V REGULATOR)
IC1108
C0CBCBC00130
(+3.3V REGULATOR)
Q1101
UNR521300L
(SWITCHING)
Q1110
2SD1819ARL
(INVERTER)
IC1104
C0DBAYY00219
(+3.3V CONTROL)
Q1106
B1CHPD000003
(+3.3V CONTROL)
IC1103
C0DBAYY00219
(+1.2V CONTROL)
Q1107
B1CHPD000003
(+1.2V CONTROL)
Q1108
B1DHDC000028
(+5V CONTROL)
Q1103
2SD1819AOL
(+5V CONTROL)
Q1105
B1DHDC000028
(+3.3V CONTROL)
Q1104
2SD1819AOL
(+3.3V CONTROL)
Q1102
2SD1819AOL
(SWITCHING)
Q1109
Q1111
263 AG_DTV_1.5V_ON
SUB5V
MAIN5V
SUB1.8V
SUB3.3V
MAIN3.3V
SUB1.2V
(OVER VOLTAGE PROTECTION)
IC1101
IC1102
IC1205
IC1204
C0BBBA000022
(OVER CURREMT PROTECTION)
IC1203
C0DBEYY00022
(+3.3V REGULATOR)
IC1202
C0DBAYY00219
(+3.3V CONTROL)
Q1201
B1CHPD000003
(+3.3V CONTROL)
IC1201
C0DBAYY00219
(+1.2V CONTROL)
Q1202
B1CHPD000003
(+1.2V CONTROL)
FHD3.3V
DDR3.3V
FHD1.2V
(OVER VOLTAGE PROTECTION)

MAIN IV SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

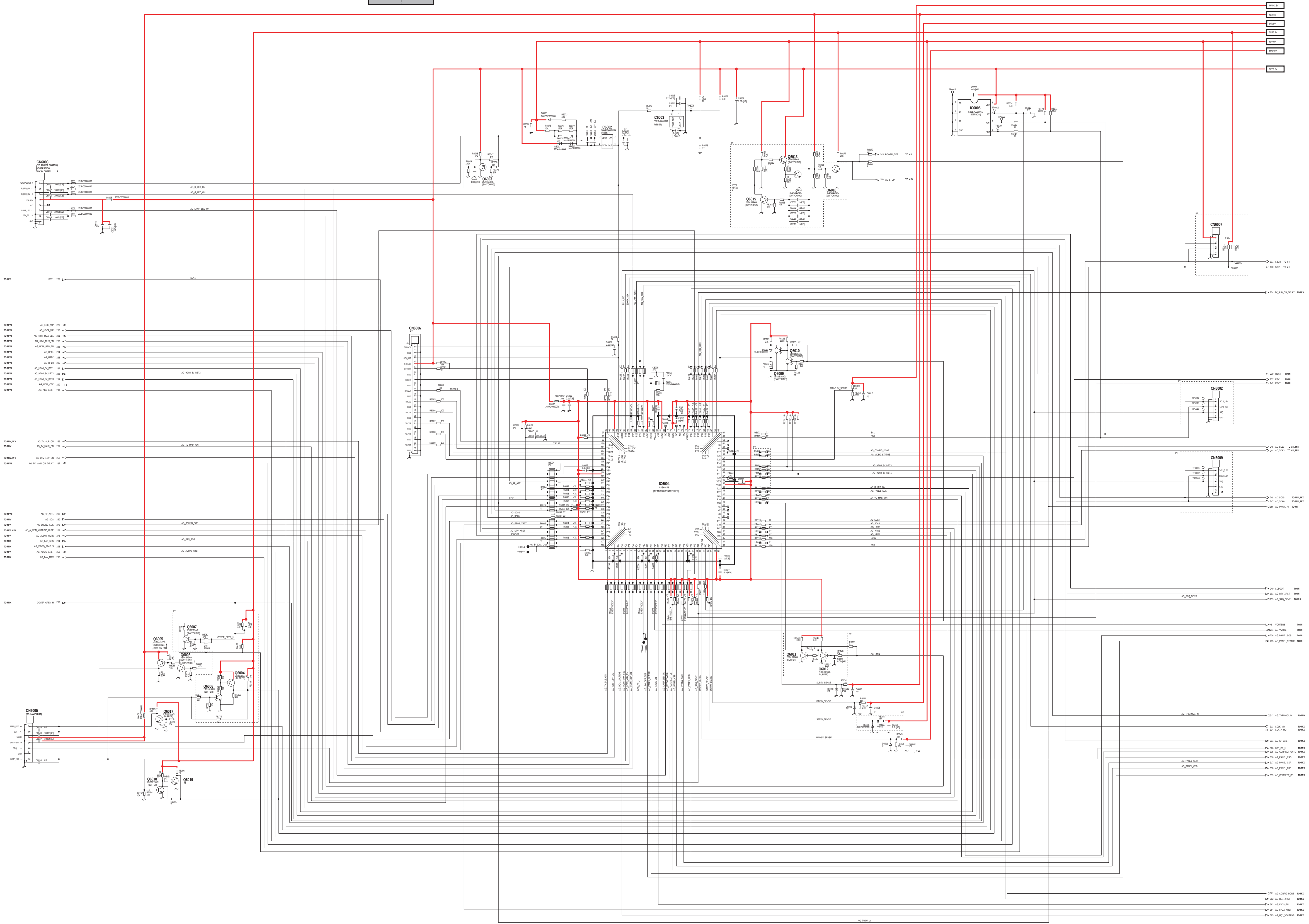
MAIN V SCHEMATIC DIAGRAM


AUDIO SIGNAL
IC4002
C0CBCBD00048
(+3.3V REGURATOR)
+3.3V REGURATOR
IC4003
C0ABBB000230
(OP AMP)
IC4001
C1AB00002747
(AUDIO-DSP)
ADAV4xyz
SLV: 34h
IC4004
C0DBFFD00003
(+1.8V REGULATOR)
+1.8V REGULATOR
IC4501
C1AB00002730
(AUDIO POWER AMP)
Q4001
2SD1819A0L
(AUDIO MUTE)
Q4002
2SD1819A0L
(AUDIO MUTE)
Q4003
2SB0766ARL
(SWITCHING)
Q4501
2SD1819A0L
(+12V REGULATOR)
Q4502
2SB1218A0L
(SWITCHING)
Q4503
2SD1819A0L
(SWITCHING)
Q4504
2SD1819A0L
(AUDIO MUTE)
Q4505
2SD1819A0L
(AUDIO MUTE)
Q4506
2SB1218A0L
(AUDIO MUTE)
Q4507
2SD1819A0L
(AUDIO MUTE)
Q4508
2SB1218A0L
(AUDIO MUTE)
CN4501
CN4502
KEY1
GND
R POS
R NEG
L POS
L NEG
TO FRONT JACK
(OPERATION P.C.B.
CN6701-7,8)
TO SPEAKER (R-CH)
TO SPEAKER (L-CH)
R TW POS
R TW NEG
L TW POS
L TW NEG
278 KEY1 TO M VI
277 AG_A_MON_MUTE/SP_MUTE TO M VI
274 TV_SUB_ON_DELAY TO M VI
AG_AUDIO_MUTE 275 TO M VI
HDMI_INT2 276 TO M VII
AG_AUDIO_XRST 268 TO M VI
TO M IV, M VI AG_DTV_+1.5V_ON 263
TO M IX MAIN_L 337
TO M IX MAIN_R 336
TO M III AD_SDA2 251
TO M III AD_SCL2 252
TO M I LRCK0 13
TO M I SRCK0 12
TO M I DMIX0 11
TO M I IECOUT0 14
TO M I 24.576M 167
TO M VII HDMI_SDIN 264
TO M VII HDMI_LRCK 265
TO M VII HDMI_BCLK 266
TO M VII HDMI_SPDIF 267
259 AG_TV_SUB_ON TO M IV, M VI
270 DTV_R TO M IX
271 DTV_L TO M IX
273 AG_SOUND_SOS TO M VI
275 AMP_GND TO M V
SUB5V
SUB3.3V
DTV5V
STB5V
SOUND10V
AUD3.3V
SIF3.3V
DVDD3.3V
DVDD1.8V
MUTE from D-AMP
from DTV
>> Monitor R
>> Monitor L
>> RESETB
Low MUTE
Low RESET
MUTE(ES2)
24.576MHz
X4001
H0J245500042
PA4001
K5H1622A0023
L4001
L4002
J0JHC0000078
L4004
G1C101KA0055
100u
L4005
J0JHC0000045
L4501
L4502
L4503
L4504
G1C100MA0173
D4503
MA3X152E0L
D4505
MA3X152E0L
SPDIF
D4001
B3RAE0000030
OPTICAL AUDIO OUT
C4060
0.1u[ZF]

MAIN V SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

MAIN VI SCHEMATIC DIAGRAM

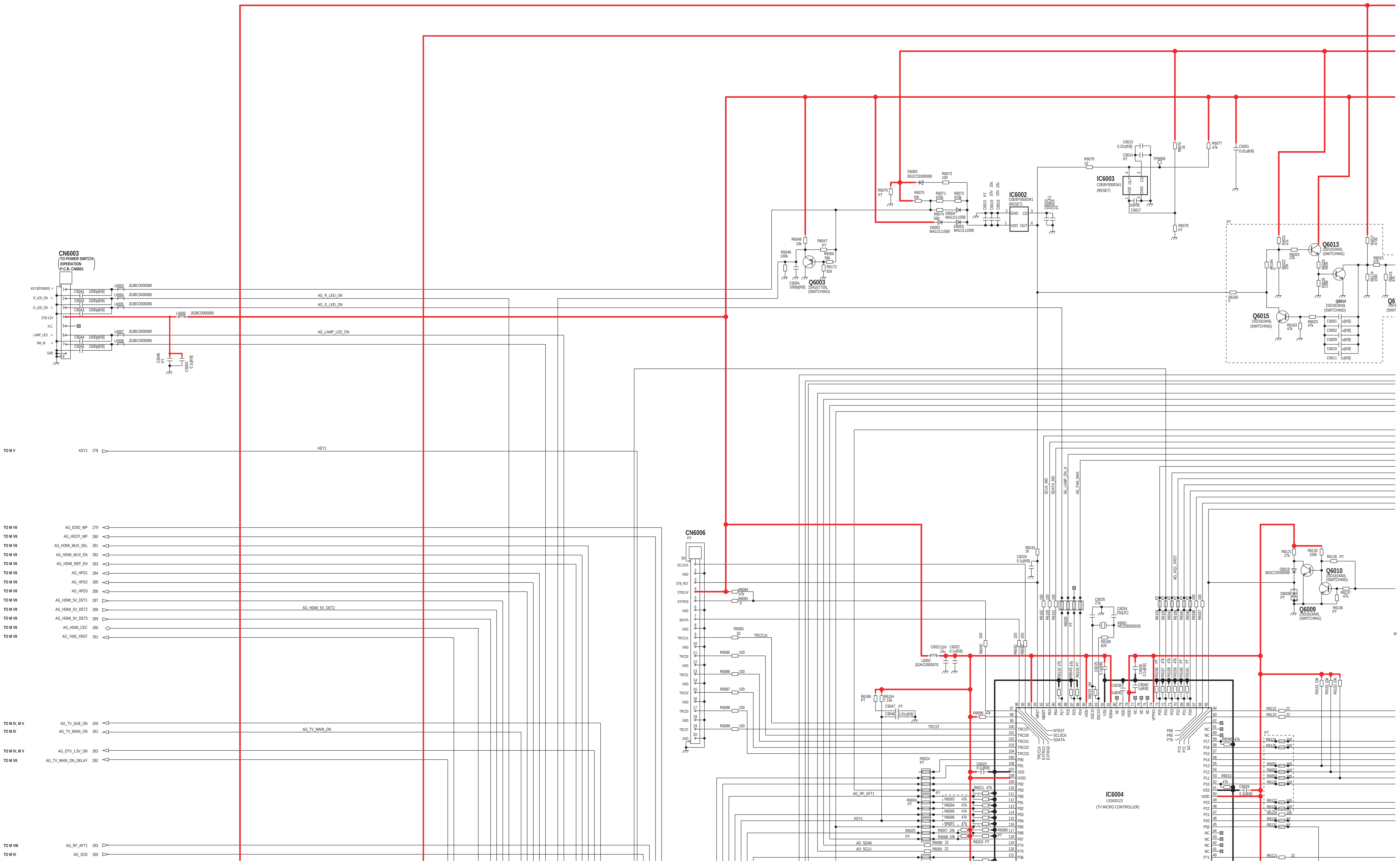
1	2
3	4


CN6003
CN6006
CN6005
CN6007
CN6002
CN6009
IC6002
IC6003
IC6004
IC6005
Q6003
Q6004
Q6005
Q6006
Q6007
Q6008
Q6009
Q6010
Q6011
Q6012
Q6013
Q6015
Q6016
Q6017
Q6018
Q6019

MAIN VI SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

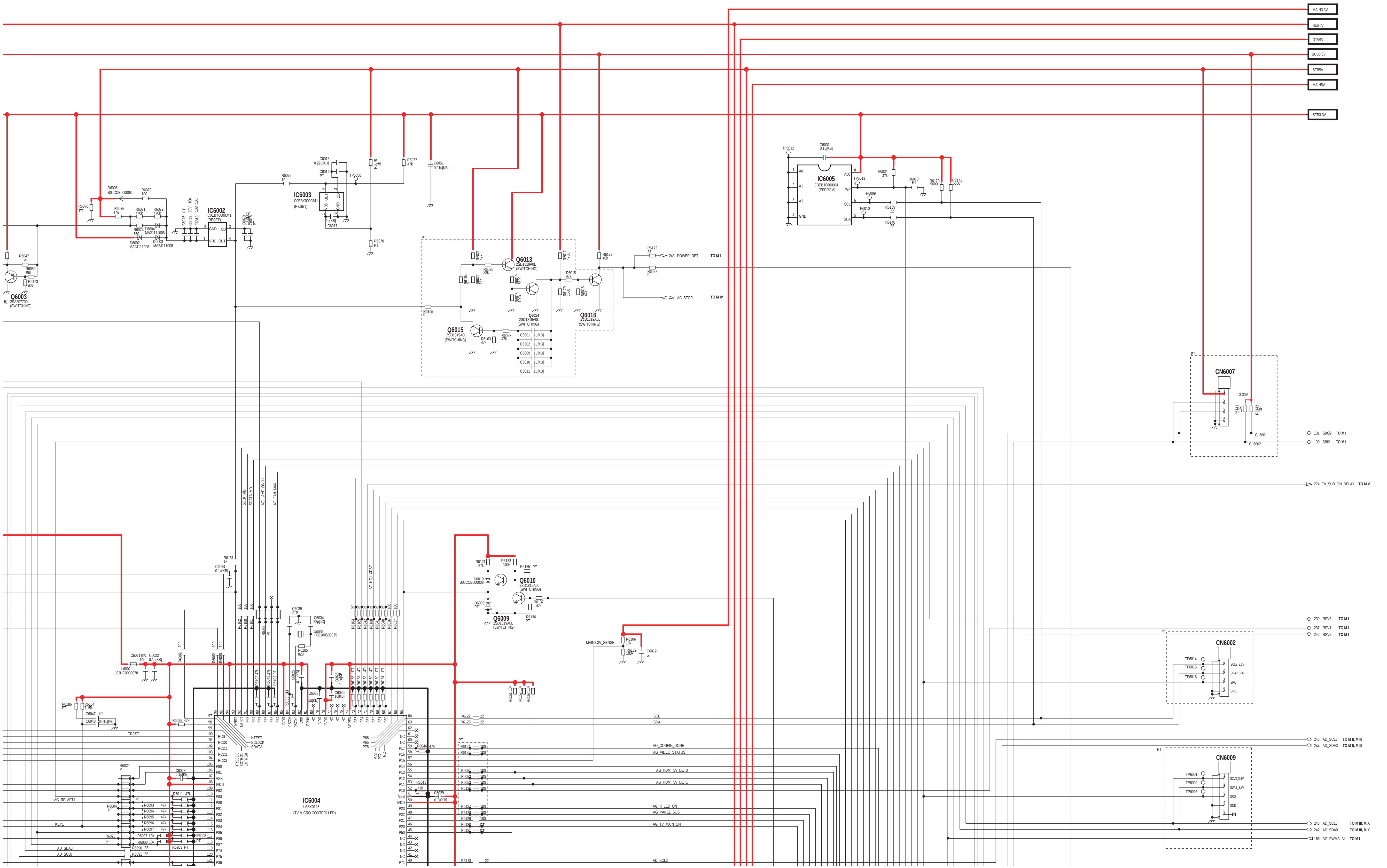
MAIN VI SCHEMATIC DIAGRAM

1	2
3	4


CN6003
(TO POWER SWITCH /OPERATION P.C.B. CN6801)
KEY(POWER)
R_LED_ON
G_LED_ON
STB 3.3V
N.C.
LAMP_LED
RM_IN
GND
AG_R_LED_ON
AG_G_LED_ON
AG_LAMP_LED_ON
IC6003
C0EBY0000341
(RESET)
IC6002
C0EBY0000341
(RESET)
Q6003
2SA2170OL
(SWITCHING)
Q6013
2SD1819A0L
(SWITCHING)
Q6014
2SD1819A0L
(SWITCHING)
Q6015
2SD1819A0L
(SWITCHING)
D6005
B0JCCE000008
D6002
MA2J11100B
D6004
MA2J11100B
D6001
MA2J11100B
TO M V
KEY1
TO M VII
AG_EDID_WP
AG_HDCP_WP
AG_HDMI_MUX_SEL
AG_HDMI_MUX_EN
AG_HDMI_REP_EN
AG_HPD1
AG_HPD2
AG_HPD3
AG_HDMI_5V_DET1
AG_HDMI_5V_DET2
AG_HDMI_5V_DET3
AG_HDMI_CEC
AG_7493_XRST
TO M IV, M V
TO M IV
AG_TV_SUB_ON
AG_TV_MAIN_ON
AG_DTV_1.5V_ON
AG_TV_MAIN_ON_DELAY
TO M VIII
AG_RF_AFT1
AG_SOS
CN6006
SCLOCK
STB_RST
STB3.3V
EXTRG0
SDATA
TRCCLK
TRCD0
TRCD1
TRCD2
TRCD3
TRCST
GND
SCLK_MD
SDATA_MD
AG_LAMP_ON_H
AG_FAN_MAX
AG_HQ_XRST
Q6010
2SD1819A0L
(SWITCHING)
Q6009
2SD1819A0L
(SWITCHING)
D6010
B0JCCE000008
X6001
H0J200500035
IC6004
LSSK0123
(TV MICRO CONTROLLER)
NTEST
SCLOCK
SDATA
AG_RF_AFT1
KEY1
AD_SDA0
AD_SCL0

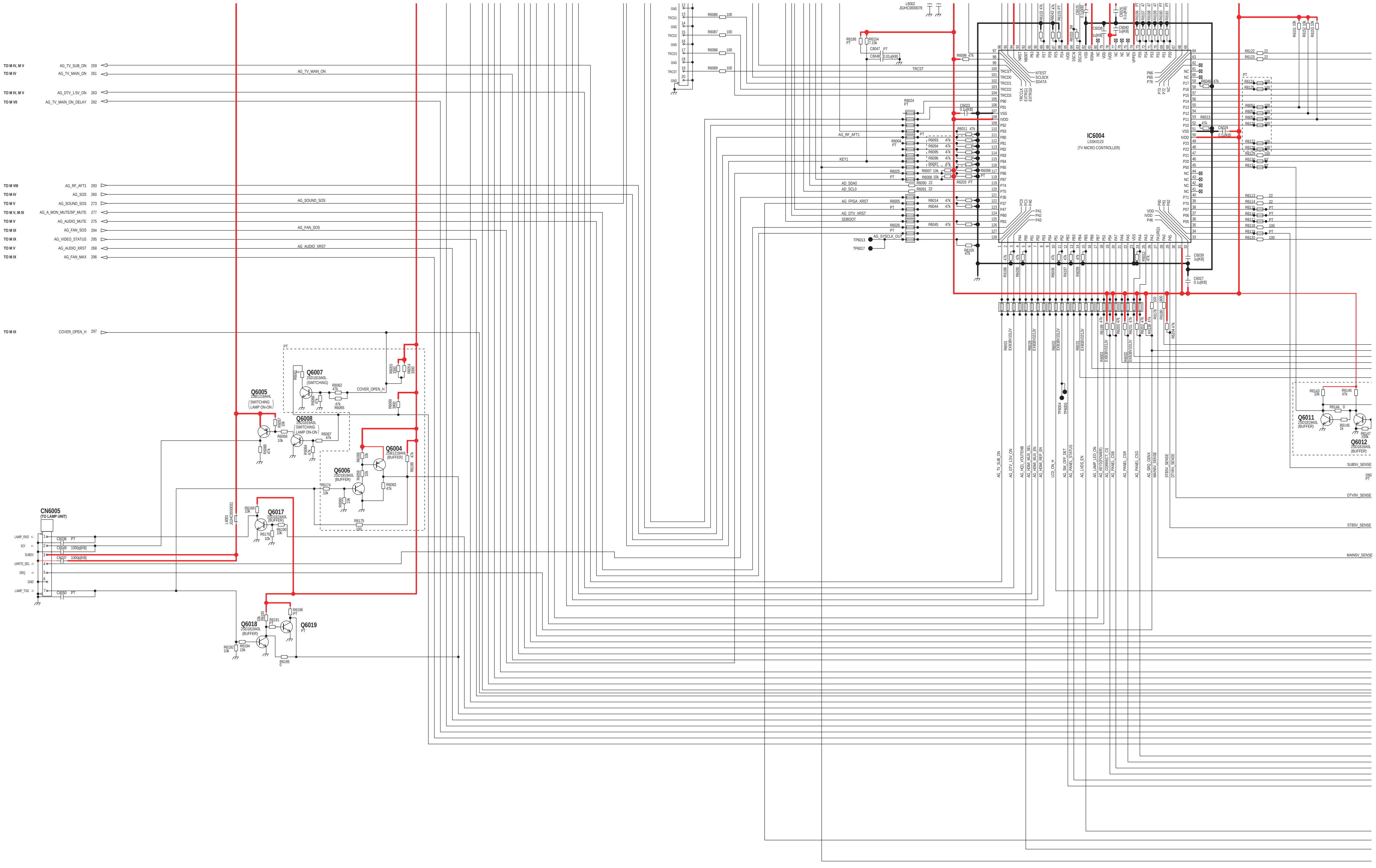
MAIN VI SCHEMATIC DIAGRAM

1	2
3	4


MAIN3.3V
SUB5V
DTV9V
SUB3.3V
STB5V
MAIN5V
STB3.3V
IC6002
C0EBY0000341
(RESET)
IC6003
C0EBY0000341
(RESET)
IC6005
C3EBJC000061
(EEPROM)
Q6003
2SA2070OL
(SWITCHING)
Q6013
2SD1819A0L
(SWITCHING)
Q6014
2SD1819A0L
(SWITCHING)
Q6015
2SD1819A0L
(SWITCHING)
Q6016
2SD1819A0L
(SWITCHING)
Q6010
2SD1819A0L
(SWITCHING)
Q6009
2SD1819A0L
(SWITCHING)
IC6004
LSSK0123
(TV MICRO CONTROLLER)
CN6007
CN6002
CN6009
243 POWER_DET TO M I
258 AC_STOP TO M IV
131 SBO2 TO M I
130 SBI2 TO M I
274 TV_SUB_ON_DELAY TO M V
239 RSV3 TO M I
237 RSV1 TO M I
242 RSV2 TO M I
245 AD_SCL3 TO M II, M III
244 AD_SDA3 TO M II, M III
248 AD_SCL0 TO M III, M X
247 AD_SDA0 TO M III, M X
166 AG_PWMA_AI TO M I
MAIN3.3V_SENSE
SCL
SDA
AG_CONFIG_DONE
AG_VIDEO_STATUS
AG_HDMI_5V_DET3
AG_HDMI_5V_DET1
AG_R_LED_ON
AG_PANEL_SOS
AG_TV_MAIN_ON
AD_SCL3
AG_RF_AFT1
KEY1
AD_SDA0
AD_SCL0
TRCST

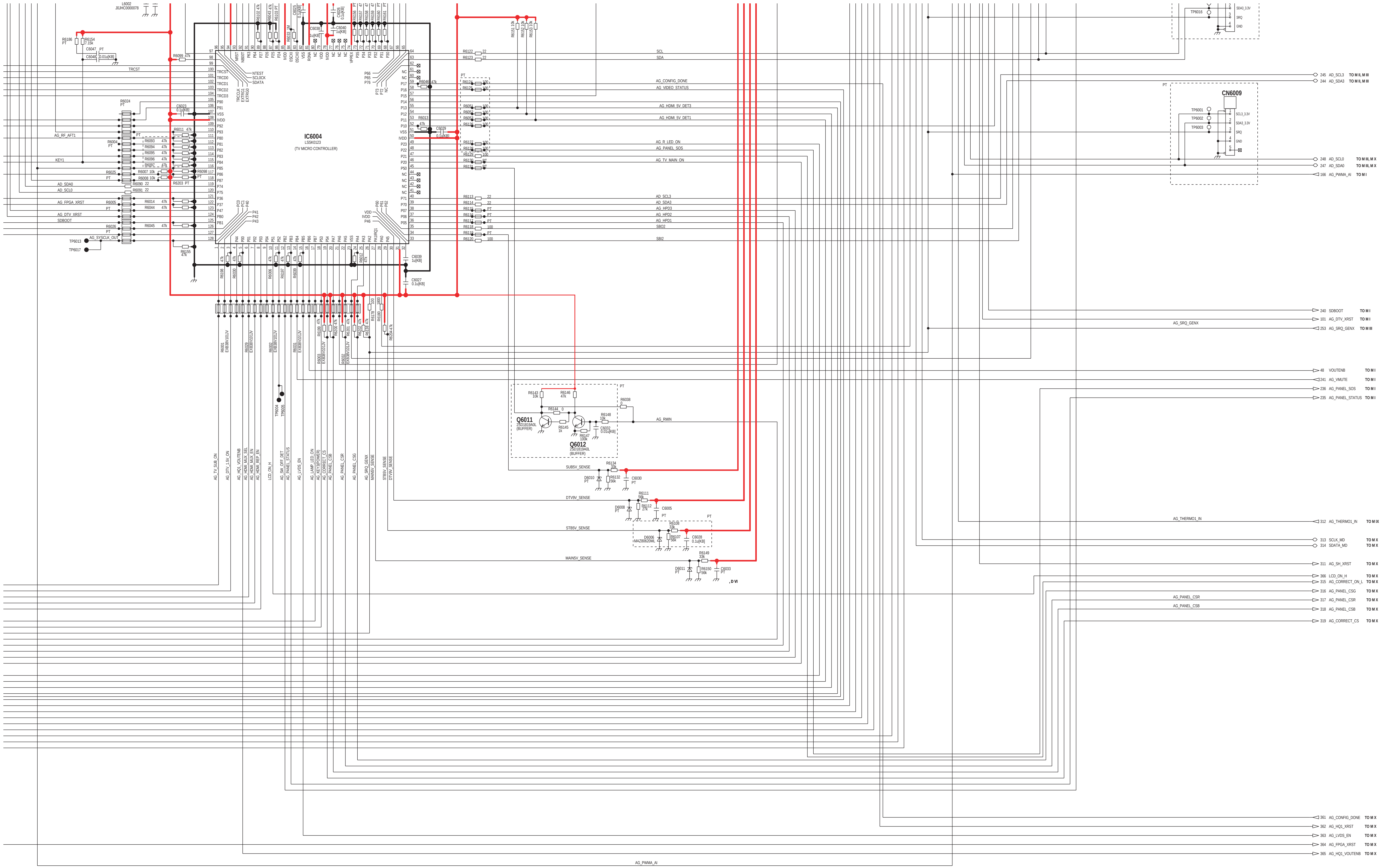
MAIN VI SCHEMATIC DIAGRAM

1	2
3	4


TO M IV, M V AG_TV_SUB_ON 259
TO M IV AG_TV_MAIN_ON 261
TO M IV, M V AG_DTV_1.5V_ON 263
TO M VII AG_TV_MAIN_ON_DELAY 292
AG_TV_MAIN_ON
TO M VIII AG_RF_AFT1 293
TO M IV AG_SOS 260
TO M V AG_SOUND_SOS 273
TO M V, M IX AG_A_MON_MUTE/SP_MUTE 277
TO M V AG_AUDIO_MUTE 275
TO M IX AG_FAN_SOS 294
TO M IX AG_VIDEO_STATUS 295
TO M V AG_AUDIO_XRST 268
TO M IX AG_FAN_MAX 296
AG_SOUND_SOS
AG_FAN_SOS
AG_AUDIO_XRST
TO M IX COVER_OPEN_H 297
COVER_OPEN_H
IC6004
LSSK0123
(TV MICRO CONTROLLER)
TRCST
AG_RF_AFT1
KEY1
AD_SDA0
AD_SCL0
AG_FPGA_XRST
AG_DTV_XRST
SDBOOT
AG_SYSCLK_OUT
TP6013
TP6017
L6002
J0JHC0000078
Q6005
2SB1218AHL
(SWITCHING LAMP ON-ON)
Q6007
2SD1819A0L
(SWITCHING)
Q6008
2SD1819A0L
(SWITCHING LAMP ON-ON)
Q6004
2SB1218AHL
(BUFFER)
Q6006
2SD1819A0L
(BUFFER)
Q6017
2SD1819A0L
(BUFFER)
Q6018
2SD1819A0L
(BUFFER)
Q6019
PT
CN6005
(TO LAMP UNIT)
LAMP_RXD
SCI
SUBSV
UART0_SEL
SRQ
GND
LAMP_TXD
Q6011
2SD1819A0L
(BUFFER)
Q6012
2SD1819A0L
(BUFFER)
SUBSV_SENSE
D60
PT
DTV9V_SENSE
STBSV_SENSE
MAINSV_SENSE
AG_TV_SUB_ON
AG_DTV_1.5V_ON
AG_HQ1_VOUTENB
AG_HDMI_MUX_SEL
AG_HDMI_MAIN_ON
AG_HDMI_REP_EN
LCD_ON_H
AG_SW_OFF_DET
AG_PANEL_STATUS
AG_LVDS_EN
AG_LAMP_LED_ON
AG_KEYDPOWER
AG_CORRECT_CS
AG_PANEL_CSB
AG_PANEL_CSB
AG_PANEL_CSB
AG_SPIO_GENX
MAINSV_SENSE
STBSV_SENSE
DTV9V_SENSE

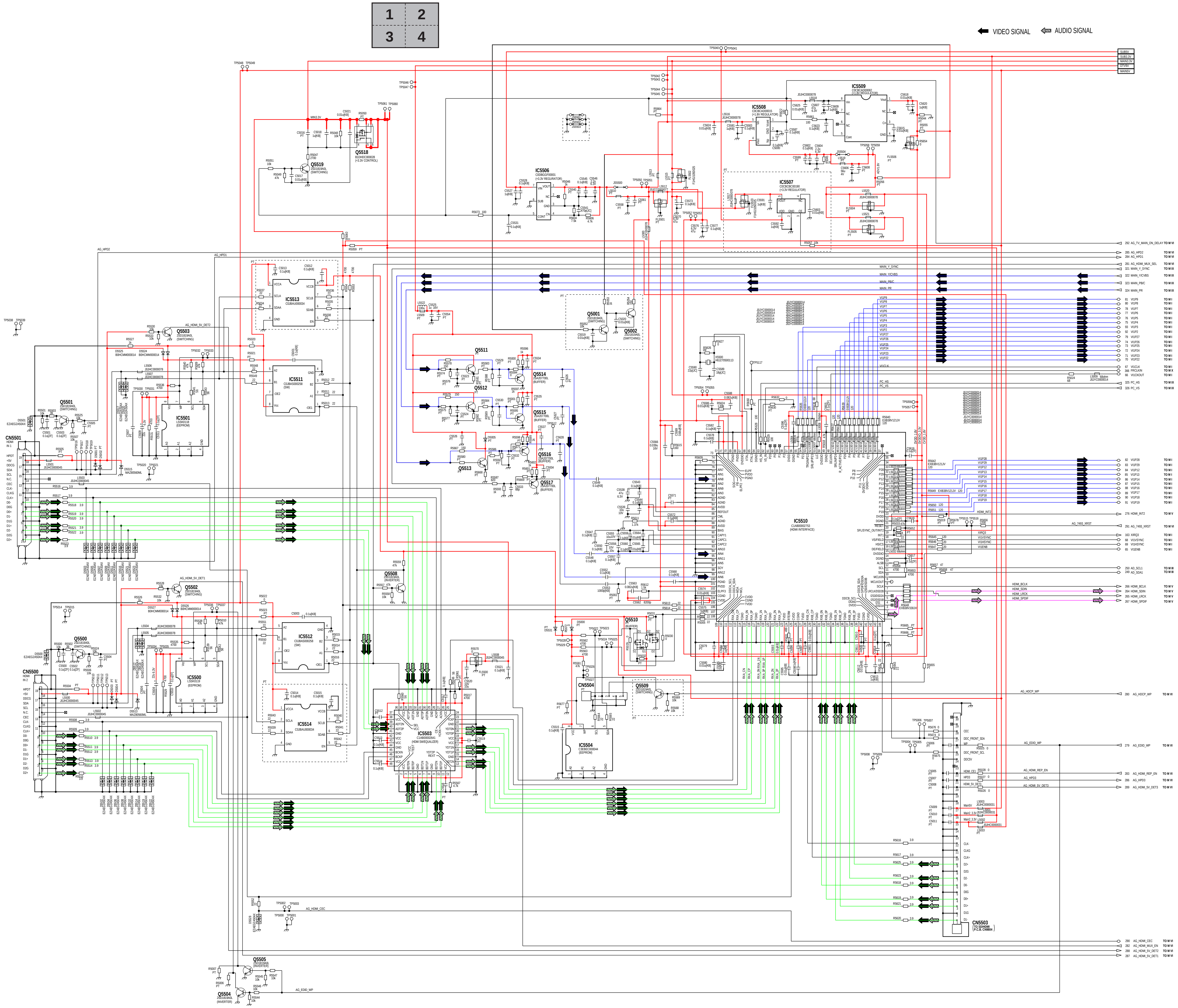
MAIN VI SCHEMATIC DIAGRAM

1	2
3	**4**



IC6004
LSSK0123
(TV MICRO CONTROLLER)
Q6011
2SD1819A0L
(BUFFER)
Q6012
2SD1819A0L
(BUFFER)
CN6009
L6002
J0JHC0000078
TRCST
AG_RF_AFT1
KEY1
AD_SDA0
AD_SCL0
AG_FPGA_XRST
AG_DTV_XRST
SDBOOT
AG_SYSCLK_OUT
TP6013
TP6017
TP6016
TP6001
TP6002
TP6003
SCL
SDA
AG_CONFIG_DONE
AG_VIDEO_STATUS
AG_HDMI_5V_DET3
AG_HDMI_5V_DET1
AG_R_LED_ON
AG_PANEL_SOS
AG_TV_MAIN_ON
AD_SCL3
AD_SDA3
AG_HPD3
AG_HPD2
AG_HPD1
SBO2
SBI2
AG_RMN
SUB5V_SENSE
DTV9V_SENSE
STB5V_SENSE
MAIN5V_SENSE
AG_SRQ_GENX
AG_THERMO1_IN
AG_PANEL_CSR
AG_PANEL_CSB
AG_PWMA_AI
SDA3_3.3V
SRQ
GND
SCL3_3.3V
D6006
MA2B062JML
D6008
D6010
D6011
AG_TV_SUB_ON
AG_DTV_1.5V_ON
AG_HQ1_VOUTENB
AG_HDMI_MUX_SEL
AG_HDMI_MUX_EN
AG_HDMI_REP_EN
LCD_ON_H
AG_SW_OFF_DET
AG_PANEL_STATUS
AG_LVDS_EN
AG_LAMP_LED_ON
AG_KEY(POWER)
AG_CORRECT_ON
AG_PANEL_CSR
AG_PANEL_CSG
AG_SRQ_GENX
MAIN5V_SENSE
STB5V_SENSE
DTV9V_SENSE
245 AD_SCL3 TO M II, M III
244 AD_SDA3 TO M II, M III
248 AD_SCL0 TO M III, M X
247 AD_SDA0 TO M III, M X
166 AG_PWMA_AI TO M I
240 SDBOOT TO M I
101 AG_DTV_XRST TO M I
253 AG_SRQ_GENX TO M III
48 VOUTENB TO M I
241 AG_VMUTE TO M I
238 AG_PANEL_SOS TO M I
235 AG_PANEL_STATUS TO M I
312 AG_THERMO1_IN TO M IX
313 SCLK_MD TO M X
314 SDATA_MD TO M X
311 AG_SH_XRST TO M X
366 LCD_ON_H TO M X
315 AG_CORRECT_ON_L TO M X
316 AG_PANEL_CSG TO M X
317 AG_PANEL_CSR TO M X
318 AG_PANEL_CSB TO M X
319 AG_CORRECT_CS TO M X
361 AG_CONFIG_DONE TO M X
362 AG_HQ1_XRST TO M X
363 AG_LVDS_EN TO M X
364 AG_FPGA_XRST TO M X
365 AG_HQ1_VOUTENB TO M X
D VI

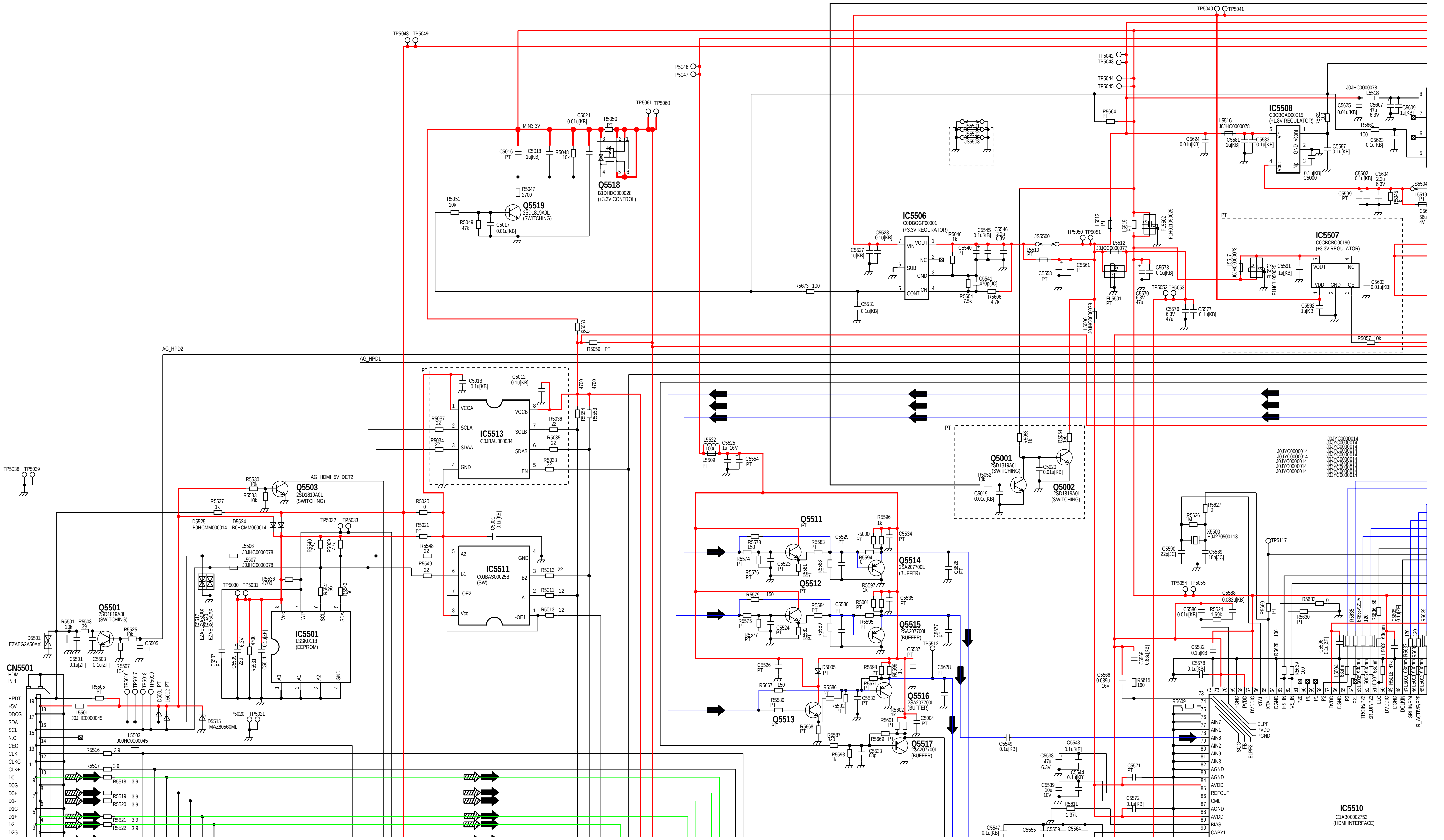
MAIN VII SCHEMATIC DIAGRAM


1
2
3
4
VIDEO SIGNAL
AUDIO SIGNAL
IC5509
IC5508
IC5507
Q5506
Q5518
Q5519
IC5513
IC5511
IC5501
Q5501
Q5503
CN5501
Q5001
Q5002
Q5511
Q5512
Q5513
Q5514
Q5515
Q5516
Q5517
IC5510
Q5508
Q5502
Q5500
IC5512
IC5500
CN5500
IC5514
IC5503
Q5510
CN5504
IC5504
Q5509
CN5503
Q5505
Q5504

MAIN VII SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

MAIN VII SCHEMATIC DIAGRAM

1	2
3	4

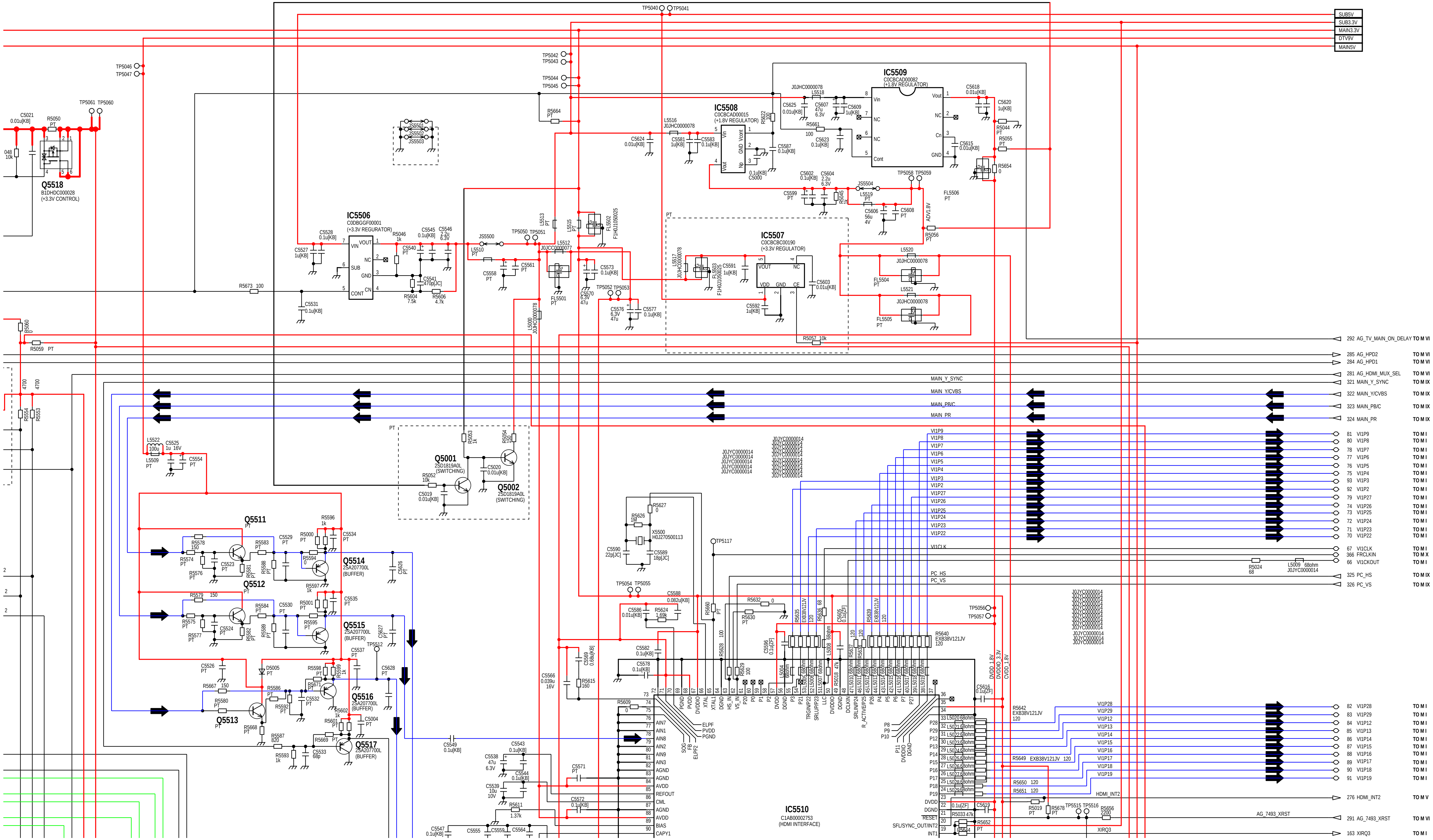


TP5048 TP5049
TP5046 TP5047
TP5061 TP5060
MIN3.3V
Q5518
B1DHDC000028
(+3.3V CONTROL)
Q5519
2SD1819A0L
(SWITCHING)
IC5506
C0DBGGF00001
(+3.3V REGULATOR)
IC5508
C0CBCAD00015
(+1.8V REGULATOR)
IC5507
C0CBCBC00190
(+3.3V REGULATOR)
TP5040 TP5041
TP5042 TP5043
TP5044 TP5045
AG_HPD2
AG_HPD1
IC5513
C0JBAU000034
VCCA
SCLA
SDAA
GND
VCCB
SCLB
SDAB
EN
Q5503
2SD1819A0L
(SWITCHING)
AG_HDMI_5V_DET2
Q5001
2SD1819A0L
(SWITCHING)
Q5002
2SD1819A0L
(SWITCHING)
IC5511
C0JBAS000258
(SW)
IC5501
L5SK0118
(EEPROM)
Q5501
2SD1819A0L
(SWITCHING)
Q5511
Q5512
Q5513
Q5514
2SA2077O0L
(BUFFER)
Q5515
2SA2077O0L
(BUFFER)
Q5516
2SA2077O0L
(BUFFER)
Q5517
2SA2077O0L
(BUFFER)
X5500
H0J270500113
CN5501
HDMI
IN 1
HPDT
+5V
DDCG
SDA
SCL
N.C.
CEC
CLK-
CLKG
CLK+
D0-
D0G
D0+
D1-
D1G
D1+
D2-
D2G
D5501
EZAEG2A50AX
D5515
MAZ80560ML
D5525
B0HCMM000014
D5524
B0HCMM000014
TP5038 TP5039
TP5030 TP5031
TP5032 TP5033
TP5020 TP5021
TP5050 TP5051
TP5052 TP5053
TP5054 TP5055
TP5117
JS5500
IC5510
C1AB00002753
(HDMI INTERFACE)
AIN7
AIN1
AIN8
AIN2
AIN9
AIN3
AGND
AGND
AVDD
REFOUT
CML
AGND
AVDD
BIAS
CAPY1
ELPF
PVDD
PGND

MAIN VII SCHEMATIC DIAGRAM

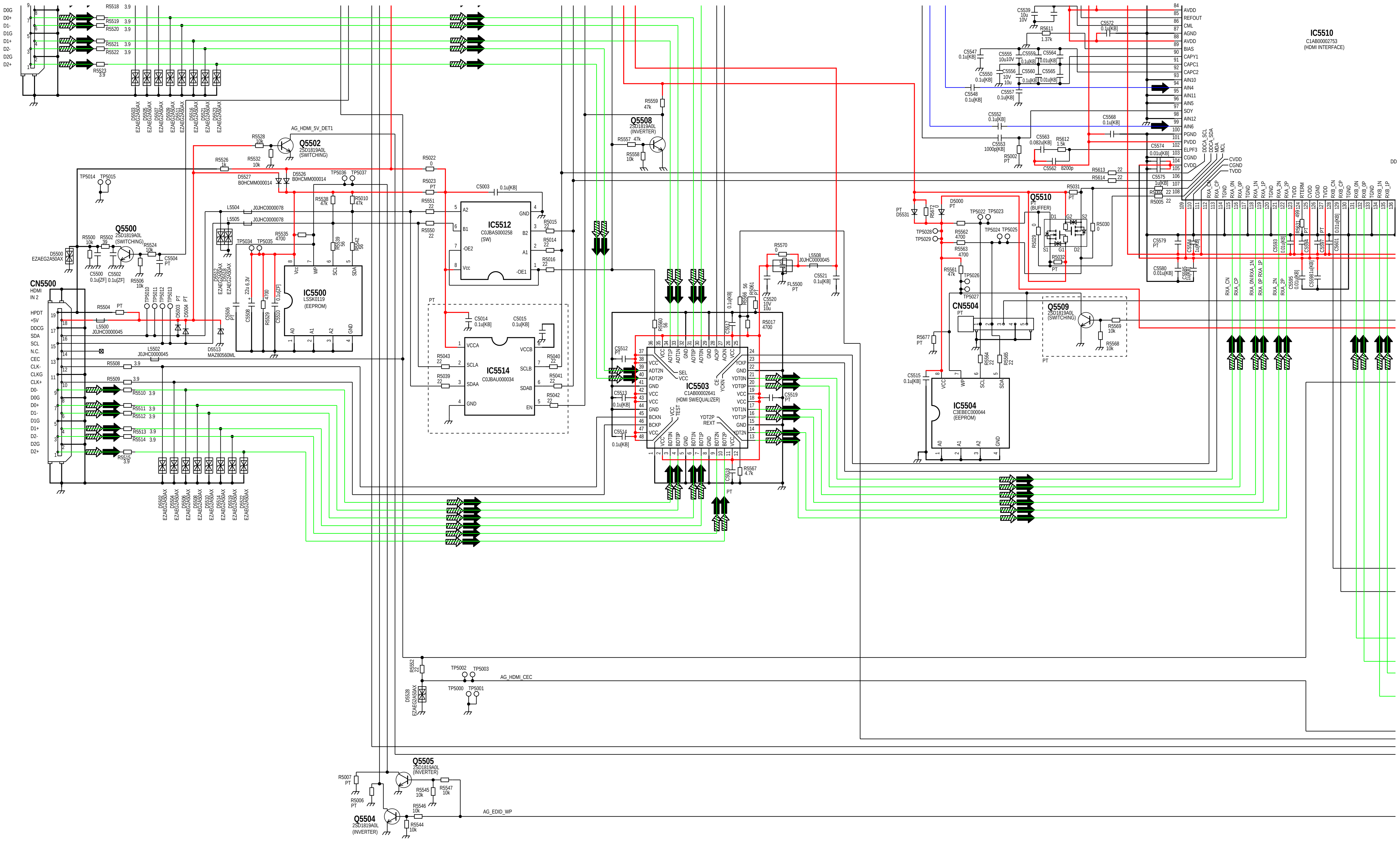
1	2
3	4

⬅ VIDEO SIGNAL ⇐ AUDIO SIGNAL

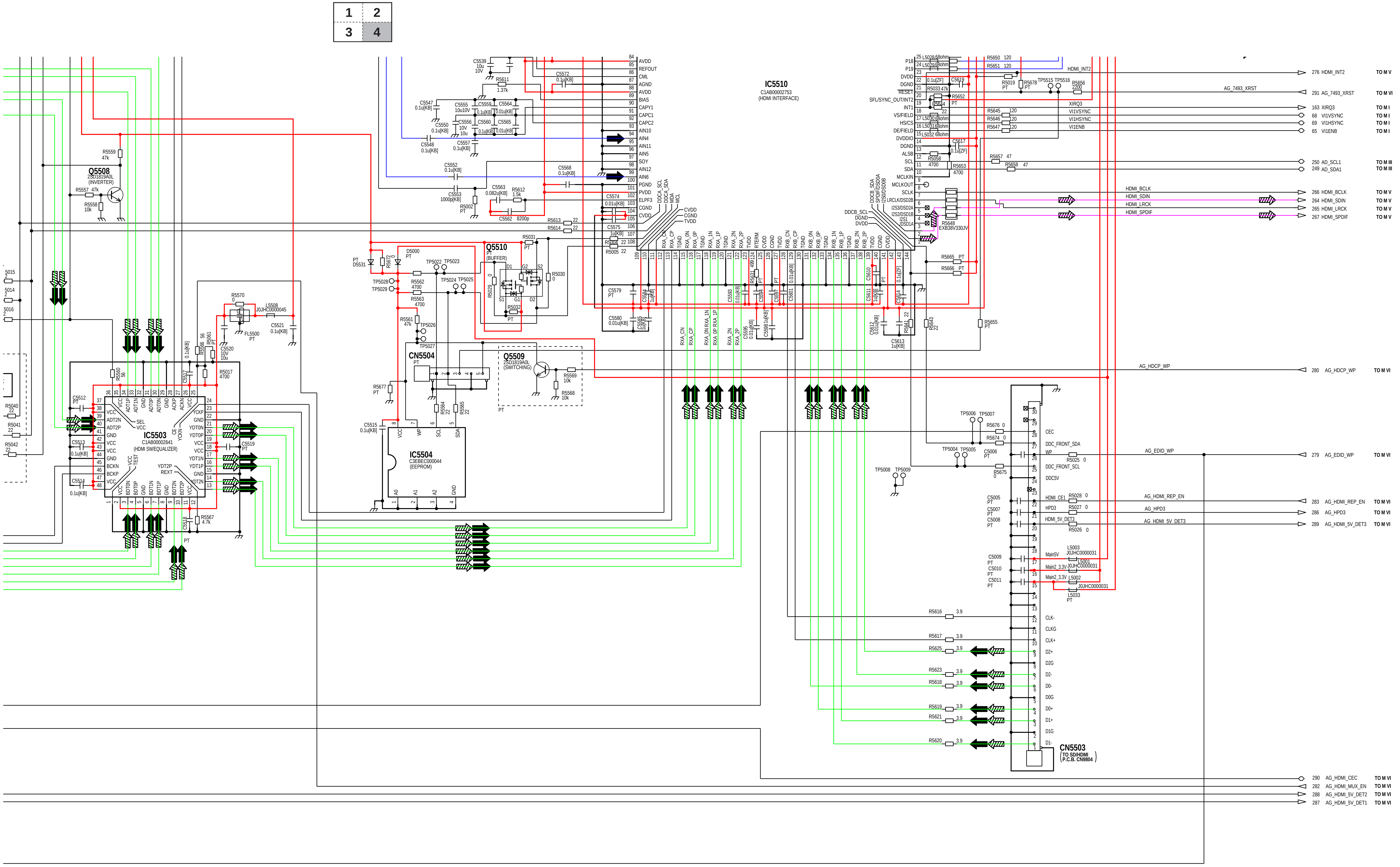

SUB5V
SUB3.3V
MAIN3.3V
DTV9V
MAIN5V
Q5518
B1DHDC000028
(+3.3V CONTROL)
IC5506
C0DBGGF00001
(+3.3V REGURATOR)
IC5508
C0CBCAD00015
(+1.8V REGULATOR)
IC5509
C0CBCAD00082
(+1.8V REGURATOR)
IC5507
C0CBCBC00190
(+3.3V REGULATOR)
Q5001
2SD1819A0L
(SWITCHING)
Q5002
2SD1819A0L
(SWITCHING)
Q5511
Q5512
Q5513
Q5514
2SA2077O0L
(BUFFER)
Q5515
2SA2077O0L
(BUFFER)
Q5516
2SA2077O0L
(BUFFER)
Q5517
2SA2077O0L
(BUFFER)
IC5510
C1AB00002753
(HDMI INTERFACE)
292 AG_TV_MAIN_ON_DELAY TO M VI
285 AG_HPD2 TO M VI
284 AG_HPD1 TO M VI
281 AG_HDMI_MUX_SEL TO M VI
321 MAIN_Y_SYNC TO M IX
322 MAIN_Y/CVBS TO M IX
323 MAIN_PB/C TO M IX
324 MAIN_PR TO M IX
81 VI1P9 TO M I
80 VI1P8 TO M I
78 VI1P7 TO M I
77 VI1P6 TO M I
76 VI1P5 TO M I
75 VI1P4 TO M I
93 VI1P3 TO M I
92 VI1P2 TO M I
79 VI1P27 TO M I
74 VI1P26 TO M I
73 VI1P25 TO M I
72 VI1P24 TO M I
71 VI1P23 TO M I
70 VI1P22 TO M I
67 VI1CLK TO M I
366 FRCLKIN TO M X
66 VI1CKOUT TO M I
325 PC_HS TO M IX
326 PC_VS TO M IX
82 VI1P28 TO M I
83 VI1P29 TO M I
84 VI1P12 TO M I
85 VI1P13 TO M I
86 VI1P14 TO M I
87 VI1P15 TO M I
88 VI1P16 TO M I
89 VI1P17 TO M I
90 VI1P18 TO M I
91 VI1P19 TO M I
276 HDMI_INT2 TO M V
291 AG_7493_XRST TO M VI
163 XIRQ3 TO M I

MAIN VII SCHEMATIC DIAGRAM

1	2
3	4

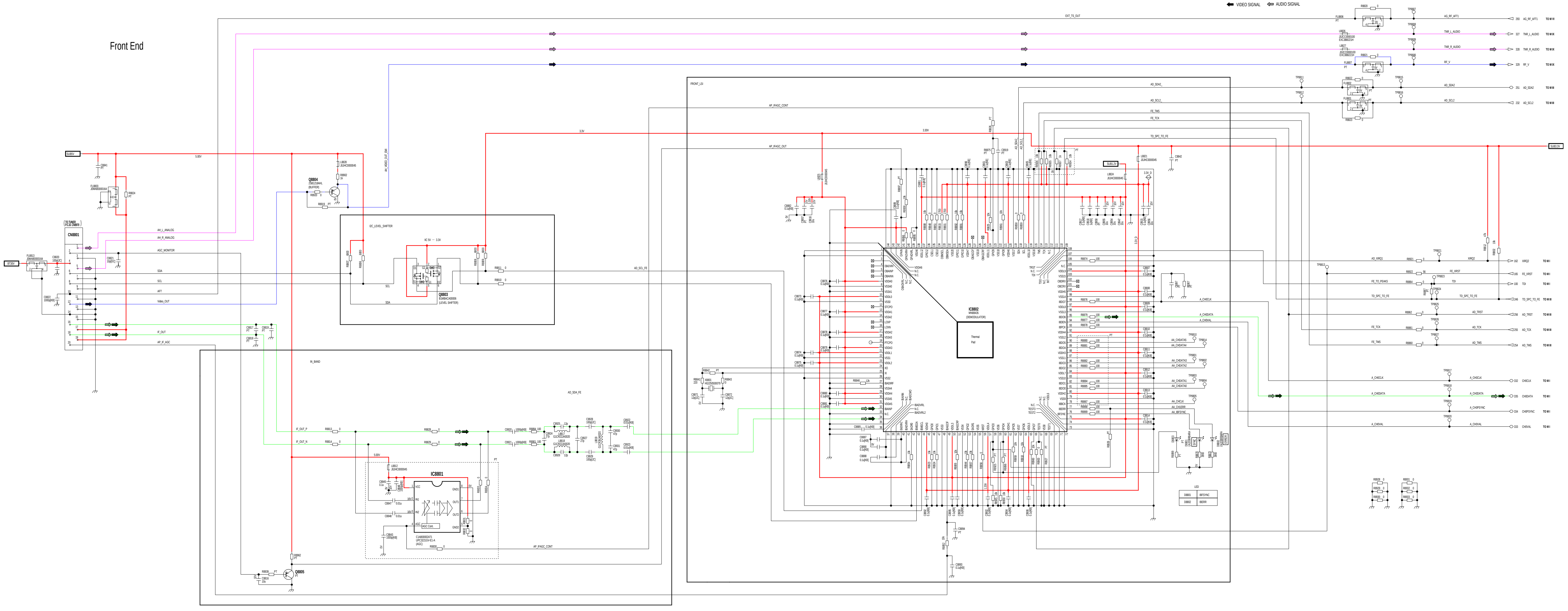

CN5500
HDMI
IN 2
HPDT
+5V
DDCG
SDA
SCL
N.C.
CEC
CLK-
CLKG
CLK+
D0-
D0G
D0+
D1-
D1G
D1+
D2-
D2G
D2+
Q5500
2SD1819A0L
(SWITCHING)
Q5502
2SD1819A0L
(SWITCHING)
AG_HDMI_5V_DET1
IC5500
LSSK0119
(EEPROM)
IC5512
C0JBAS000258
(SW)
IC5514
C0JBAU000034
Q5508
2SD1819A0L
(INVERTER)
IC5503
C1AB00002641
(HDMI SW/EQUALIZER)
Q5510
(BUFFER)
CN5504
Q5509
2SD1819A0L
(SWITCHING)
IC5504
C3EBEC000044
(EEPROM)
IC5510
C1AB00002753
(HDMI INTERFACE)
AG_HDMI_CEC
Q5505
2SD1819A0L
(INVERTER)
Q5504
2SD1819A0L
(INVERTER)
AG_EDID_WP

MAIN VII SCHEMATIC DIAGRAM


1
2
3
4
IC5510
C1AB00002753
(HDMI INTERFACE)
IC5503
C1AB00002641
(HDMI SW/EQUALIZER)
IC5504
C3EBEC000044
(EEPROM)
Q5508
2SD1819A0L
(INVERTER)
Q5510
(BUFFER)
Q5509
2SD1819A0L
(SWITCHING)
CN5504
CN5503
(TO SD/HDMI P.C.B. CN9804)
AVDD
REFOUT
CML
AGND
BIAS
CAPY1
CAPC1
CAPC2
AIN10
AIN4
AIN11
AIN5
AIN12
SOY
AIN6
PGND
PVDD
ELPF3
CGND
CVDD
HDMI_INT2
AG_7493_XRST
XIRQ3
VI1VSYNC
VI1HSYNC
VI1ENB
AD_SCL1
AD_SDA1
HDMI_BCLK
HDMI_SDIN
HDMI_LRCK
HDMI_SPDIF
AG_HDCP_WP
AG_EDID_WP
AG_HDMI_REP_EN
AG_HPD3
AG_HDMI_5V_DET3
CEC
DDC_FRONT_SDA
DDC_FRONT_SCL
DDC5V
MainSV
Main2_3.3V
CLK-
CLKG
CLK+
D2+
D2G
D2-
D0-
D0G
D0+
D1+
D1G
D1-
276 HDMI_INT2 TO M V
291 AG_7493_XRST TO M VI
163 XIRQ3 TO M I
68 VI1VSYNC TO M I
69 VI1HSYNC TO M I
65 VI1ENB TO M I
250 AD_SCL1 TO M III
249 AD_SDA1 TO M III
266 HDMI_BCLK TO M V
264 HDMI_SDIN TO M V
265 HDMI_LRCK TO M V
267 HDMI_SPDIF TO M V
280 AG_HDCP_WP TO M VI
279 AG_EDID_WP TO M VI
283 AG_HDMI_REP_EN TO M VI
286 AG_HPD3 TO M VI
289 AG_HDMI_5V_DET3 TO M VI
290 AG_HDMI_CEC TO M VI
282 AG_HDMI_MUX_EN TO M VI
288 AG_HDMI_5V_DET2 TO M VI
287 AG_HDMI_5V_DET1 TO M VI

MAIN VIII SCHEMATIC DIAGRAM

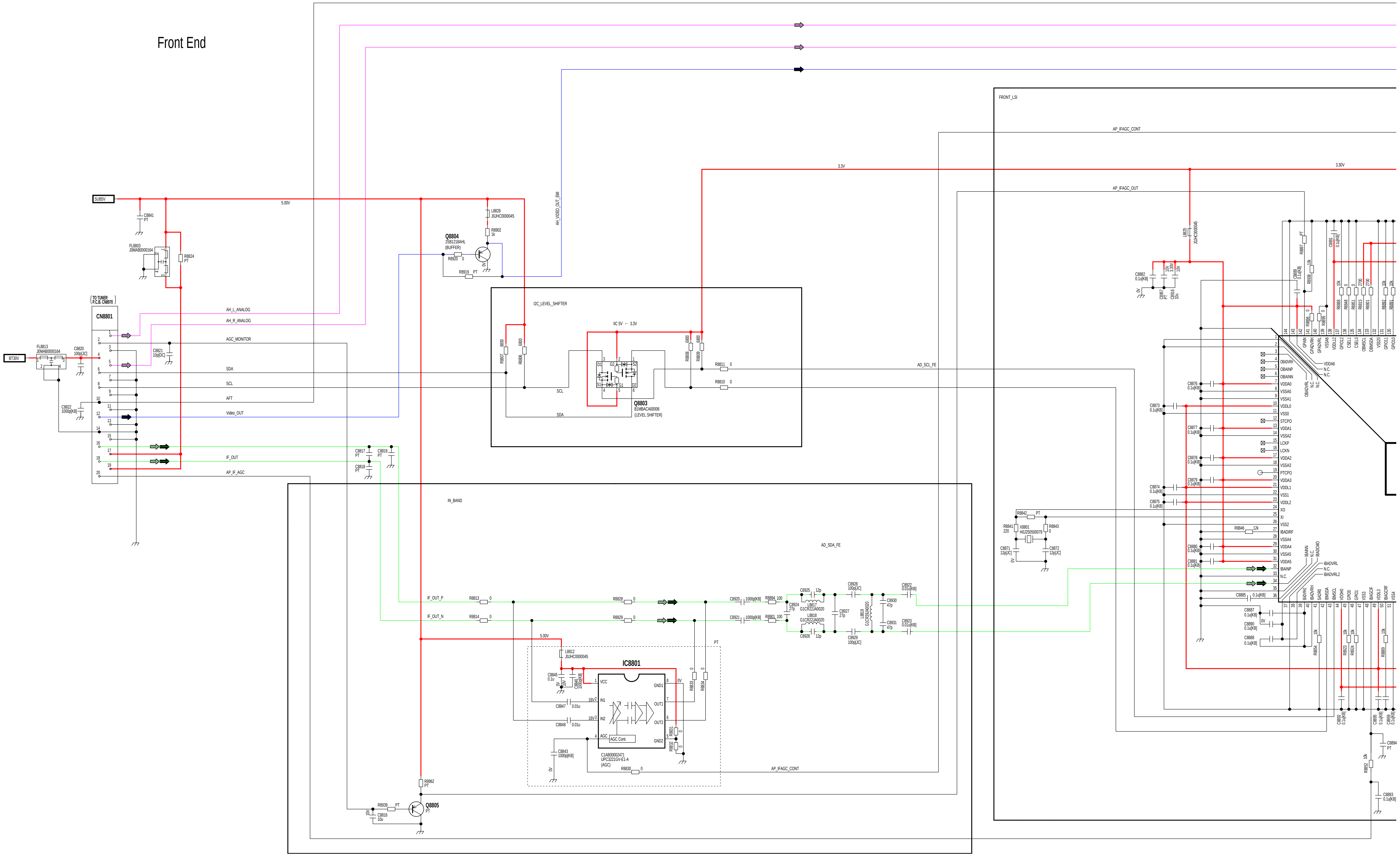
1	2


Front End
VIDEO SIGNAL
AUDIO SIGNAL
TU8801
CN8801
IC8801
IC8802
Q8803
Q8804
Q8805
I2C_LEVEL_SHIFTER
FRONT_LSI
Thermal Pad

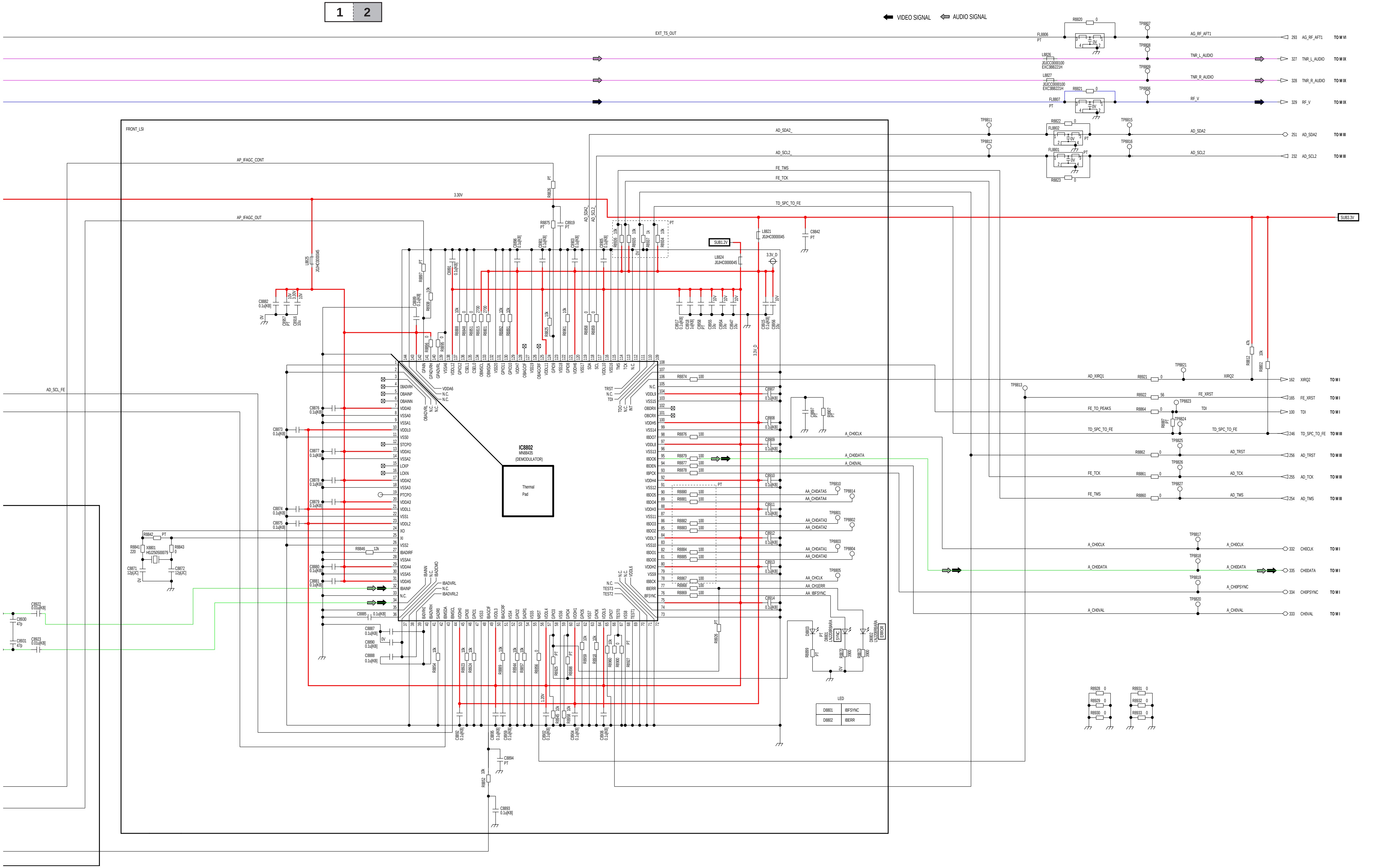
MAIN VIII SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

MAIN VIII SCHEMATIC DIAGRAM

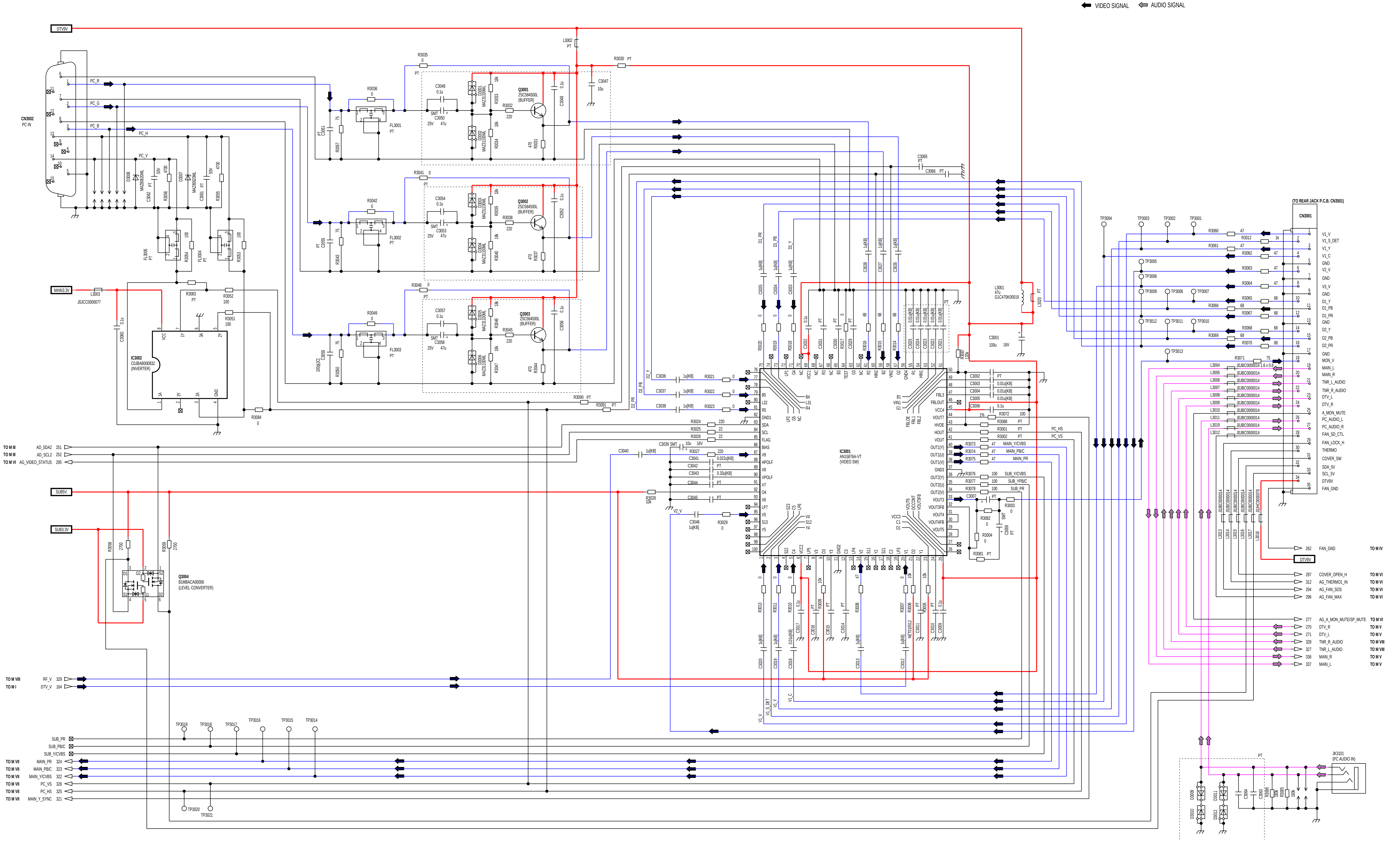
1 2


Front End
SUB5V
5.00V
C8841 PT
FL8803 J0MAB0000164
R8824 PT
L8828 J0JHC0000045
R8902 1k
Q8804 2SB1218AHL (BUFFER)
R8920 0
R8919 PT
AH_VIDEO_OUT_EMI
(TO TUNER P.C.B. CN8970)
CN8801
BT30V
FL8813 J0MAB0000164
C8820 100p[JC]
C8821 10p[DC]
C8822 1000p[KB]
AH_L_ANALOG
AH_R_ANALOG
AGC_MONITOR
SDA
SCL
AFT
Video_OUT
IF_OUT
AP_IF_AGC
C8817 PT
C8819 PT
C8818 PT
I2C_LEVEL_SHIFTER
IIC 5V ← 3.3V
R8807 6800
R8806 6800
R8808 6800
R8809 6800
R8811 0
R8810 0
Q8803 B1MBACA00006 (LEVEL SHIFTER)
AD_SCL_FE
AD_SDA_FE
IN_BAND
IF_OUT_P
IF_OUT_N
R8813 0
R8814 0
R8828 0
R8829 0
C8920 1000p[KB]
C8921 1000p[KB]
R8894 100
R8901 100
L8817 G1CR221JA0020
L8818 G1CR221JA0020
L8819 G1CR281JA0020
C8925 12p
C8926 12p
C8924 27p
C8927 27p
C8928 100p[JC]
C8929 100p[JC]
C8930 47p
C8931 47p
C8922 0.01u[KB]
C8923 0.01u[KB]
5.00V
L8812 J0JHC0000045
C8845 0.1u
C8844 1000p[KB]
C8847 0.01u
C8848 0.01u
C8843 1000p[KB]
IC8801
C1AB00002471 UPC3221GV-E1-A (AGC)
AGC Cont.
R8830 0
R8831
R8832
R8833 0
R8834 0
AP_IFAGC_CONT
R8962 PT
R8930 PT
C8816 10u
Q8805 PT
FRONT_LSI
AP_IFAGC_CONT
AP_IFAGC_OUT
3.3V
3.30V
L8825 J0JHC0000045
C8882 0.1u[KB]
C8876 0.1u[KB]
C8873 0.1u[KB]
C8877 0.1u[KB]
C8878 0.1u[KB]
C8879 0.1u[KB]
C8874 0.1u[KB]
C8875 0.1u[KB]
C8880 0.1u[KB]
C8881 0.1u[KB]
R8842 PT
R8841 220
X8801 H0J250500079
R8843 0
C8871 12p[JC]
C8872 12p[JC]
R8846 12k
C8885 0.1u[KB]
C8887 0.1u[KB]
C8890 0.1u[KB]
C8888 0.1u[KB]
C8894 PT
R8852 10k
C8893 0.1u[KB]

MAIN VIII SCHEMATIC DIAGRAM

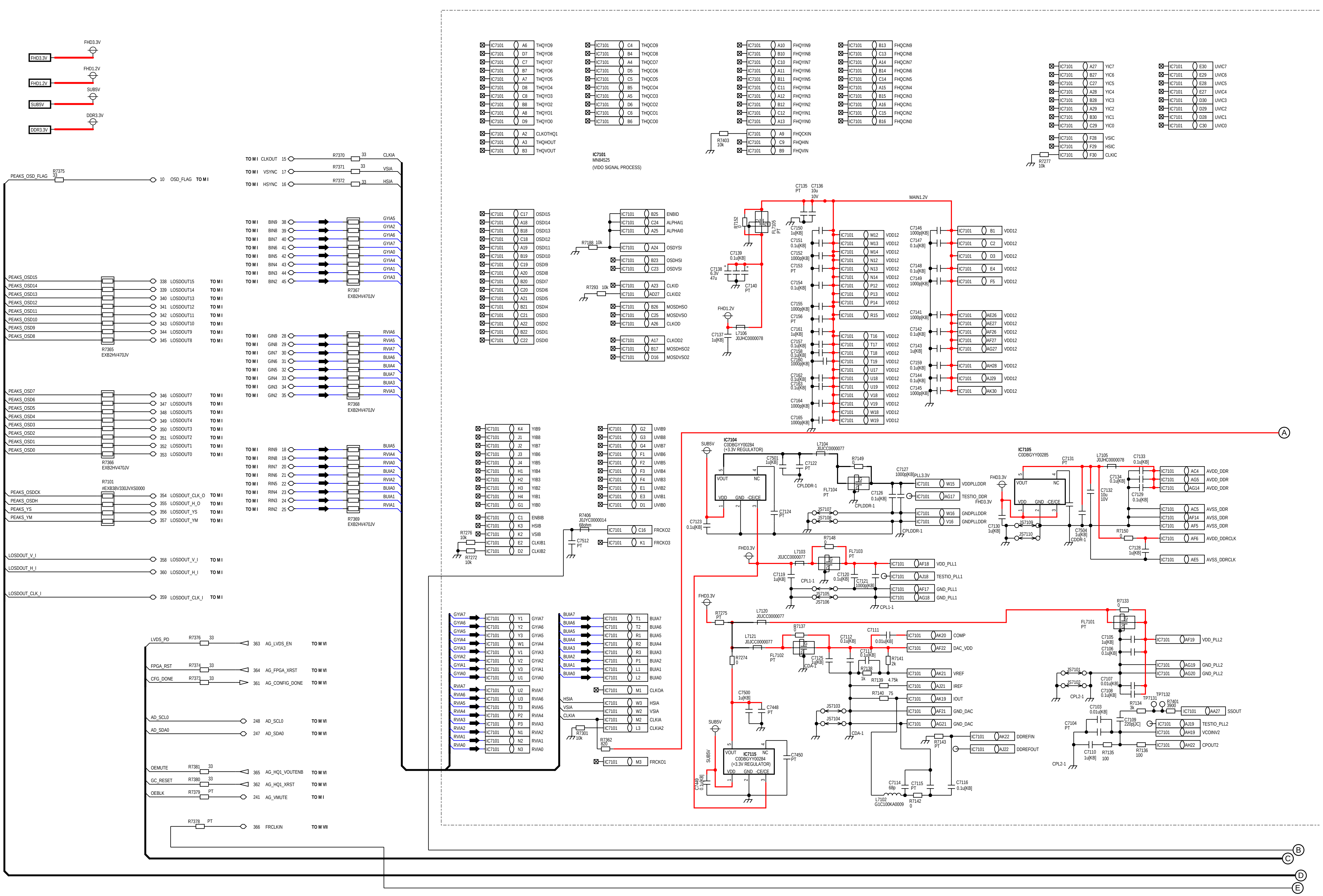

1
2
VIDEO SIGNAL
AUDIO SIGNAL
EXT_TS_OUT
FRONT_LSI
AP_IFAGC_CONT
AP_IFAGC_OUT
3.30V
AD_SCL_FE
AD_SDA2_
AD_SCL2_
FE_TMS
FE_TCK
TD_SPC_TO_FE
SUB3.3V
SUB1.2V
3.3V_D
IC8802
MN88435
(DEMODULATOR)
Thermal
Pad
X8801
H0J250500079
L8821
J0JHC0000045
L8824
J0JHC0000045
L8825
J0JHC0000045
L8826
J0JCC0000100
EXC38B221H
L8827
J0JCC0000100
EXC38B221H
FL8806
FL8807
FL8802
FL8801
AG_RF_AFT1
TNR_L_AUDIO
TNR_R_AUDIO
RF_V
AD_SDA2
AD_SCL2
AD_XIRQ1
XIRQ2
FE_XRST
FE_TO_PEAKS
TDI
TD_SPC_TO_FE
AD_TRST
FE_TCK
AD_TCK
FE_TMS
AD_TMS
A_CH0CLK
A_CH0DATA
A_CH0VAL
A_CH0PSYNC
AA_CHDATA5
AA_CHDATA4
AA_CHDATA3
AA_CHDATA2
AA_CHDATA1
AA_CHDATA0
AA_CHCLK
AA_CH1ERR
AA_IBFSYNC
293 AG_RF_AFT1 TO M VI
327 TNR_L_AUDIO TO M IX
328 TNR_R_AUDIO TO M IX
329 RF_V TO M IX
251 AD_SDA2 TO M III
232 AD_SCL2 TO M III
162 XIRQ2 TO M I
165 FE_XRST TO M I
100 TDI TO M I
246 TD_SPC_TO_FE TO M III
256 AD_TRST TO M III
255 AD_TCK TO M III
254 AD_TMS TO M III
332 CH0CLK TO M I
335 CH0DATA TO M I
334 CH0PSYNC TO M I
333 CH0VAL TO M I
D8801
D8802
LED
D8801 IBFSYNC
D8802 IBERR

MAIN IX SCHEMATIC DIAGRAM

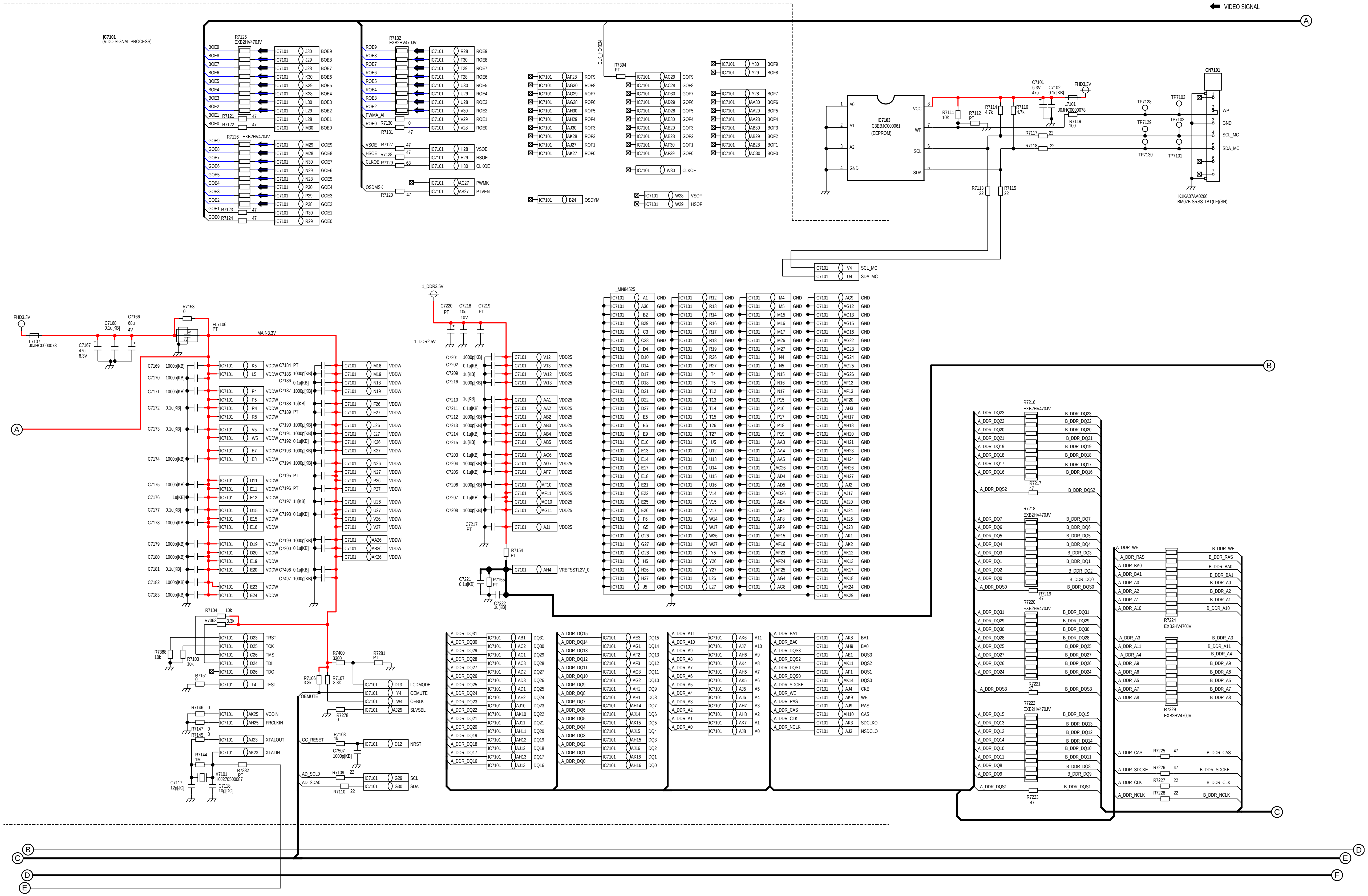

VIDEO SIGNAL
AUDIO SIGNAL
DTV9V
CN3002
PC IN
PC_R
PC_G
PC_B
PC_H
PC_V
MAIN3.3V
L3003
IC3002
C0JBAB000832
(INVERTER)
Q3001
2SC584500L
(BUFFER)
Q3002
2SC584500L
(BUFFER)
Q3003
2SC584500L
(BUFFER)
FL3001
FL3002
FL3003
IC3001
AN15876A-VT
(VIDEO SW)
L3001
SUB5V
SUB3.3V
Q3004
B1MBACA00006
(LEVEL CONVERTER)
TO M III
TO M VI
TO M VII
TO M VIII
TO M I
TO M IV
TO M V
AD_SDA2
AD_SCL2
AG_VIDEO_STATUS
RF_V
DTV_V
SUB_PR
SUB_PB/C
SUB_Y/CVBS
MAIN_PR
MAIN_PB/C
MAIN_Y/CVBS
PC_VS
PC_HS
MAIN_Y_SYNC
(TO REAR JACK P.C.B. CN3501)
CN3001
V1_V
V1_S_DET
V1_Y
V1_C
GND
V2_V
V3_V
D1_Y
D1_PB
D1_PR
D2_Y
D2_PB
D2_PR
MON_V
MAIN_L
MAIN_R
TNR_L_AUDIO
TNR_R_AUDIO
DTV_L
DTV_R
A_MON_MUTE
PC_AUDIO_L
PC_AUDIO_R
FAN_SD_CTL
FAN_LOCK_H
THERMO
COVER_SW
SDA_5V
SCL_5V
DTV9V
FAN_GND
COVER_OPEN_H
AG_THERMO1_IN
AG_FAN_SOS
AG_FAN_MAX
AG_A_MON_MUTE/SP_MUTE
JK3101
(PC AUDIO IN)

MAIN IX SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

MAIN X SCHEMATIC DIAGRAM (1/4)

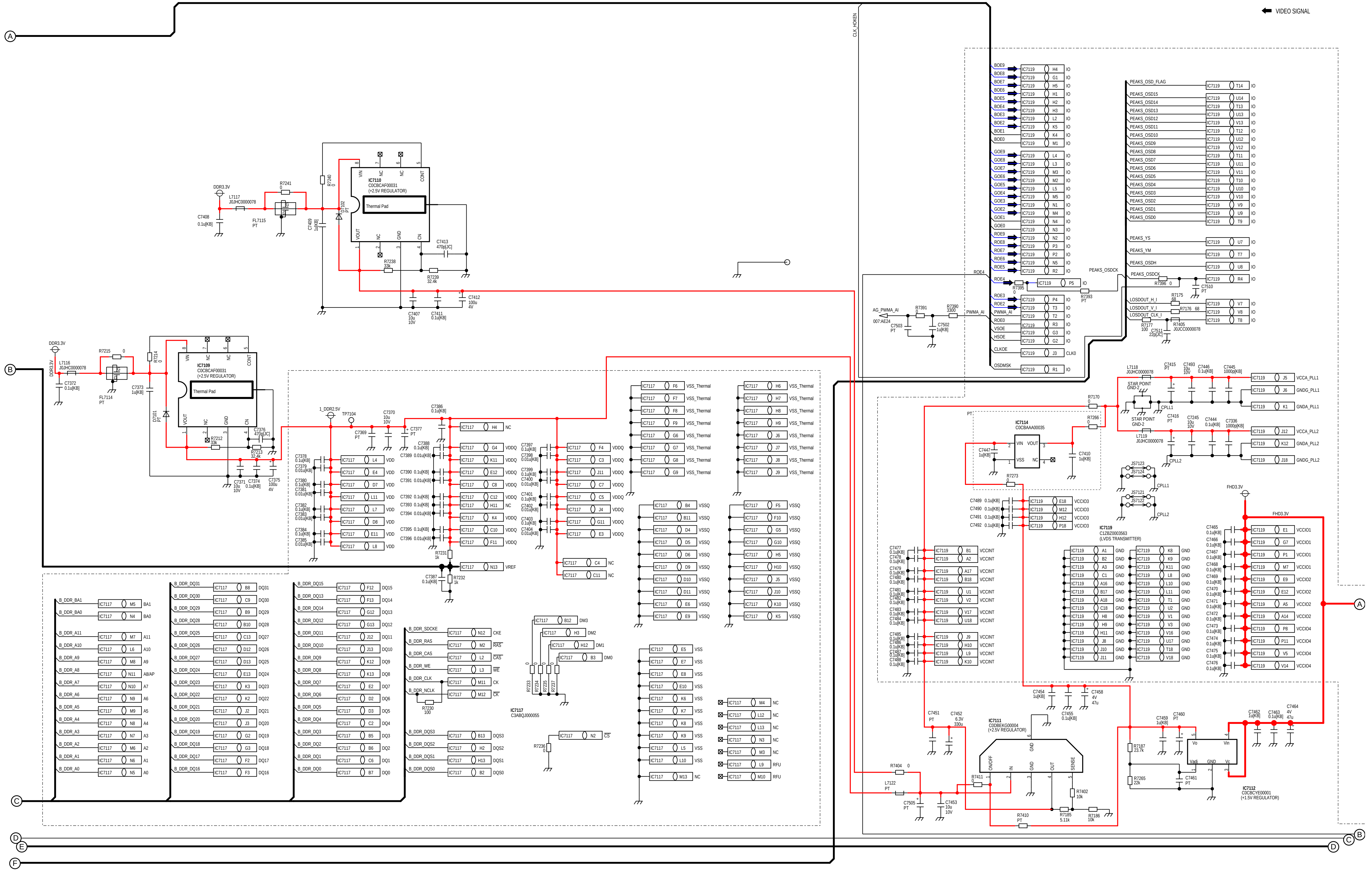

VIDEO SIGNAL
FHD3.3V
FHD1.2V
SUB5V
DDR3.3V
PEAKS_OSD_FLAG
R7375
OSD_FLAG
TO M I
CLKOUT
VSYNC
HSYNC
CLKIA
VSIA
HSIA
R7370
R7371
R7372
IC7101
MN84525
(VIDO SIGNAL PROCESS)
R7365
EXB2HV470JV
R7366
EXB2HV470JV
R7367
EXB2HV470JV
R7368
EXB2HV470JV
R7369
EXB2HV470JV
R7101
#EXB38V330JVXS0000
LOSDOUT_V_I
LOSDOUT_H_I
LOSDOUT_CLK_I
LVDS_PD
FPGA_RST
CFG_DONE
AD_SCL0
AD_SDA0
OEMUTE
GC_RESET
OEBLK
AG_LVDS_EN
AG_FPGA_XRST
AG_CONFIG_DONE
AG_HQ1_VOUTENB
AG_HQ1_XRST
AG_VMUTE
FRCLKIN
TO M VI
TO M VII
IC7104
C0DBGYY00284
(+3.3V REGULATOR)
IC7105
C0DBGYY00285
IC7115
C0DBGYY00284
(+3.3V REGULATOR)
MAIN1.2V
VDD12
AVDD_DDR
AVSS_DDR
AVDD_DDRCLK
AVSS_DDRCLK
VDD_PLL1
TESTIO_PLL1
GND_PLL1
VDD_PLL2
GND_PLL2
TESTIO_PLL2
VCONV2
CPOUT2
SSOUT
COMP
DAC_VDD
VREF
IREF
IOUT
GND_DAC
DDREFIN
DDREFOUT
VDDPLLDDR
TESTIO_DDR
GNDPLLDDR
FRCKO2
FRCKO3
FRCKO1
A
B
C
D
E

MAIN X SCHEMATIC DIAGRAM (2/4)


VIDEO SIGNAL
IC7101
(VIDO SIGNAL PROCESS)
IC7103
C3EBJC000061
(EEPROM)
CN7101
K1KA07AA0266
BM07B-SRSS-TBT(LF)(SN)
MN84525
FHD3.3V
MAIN3.3V
1_DDR2.5V
VREFSSTL2V_0
CLK_HOKEN
OSDYMI
LCDMODE
OEMUTE
OEBLK
SLVSEL
NRST
GC_RESET
AD_SCL0
AD_SDA0
XTALOUT
XTALIN
X7101
H0J270500087
SCL_MC
SDA_MC
WP
GND
A
B
C
D
E
F

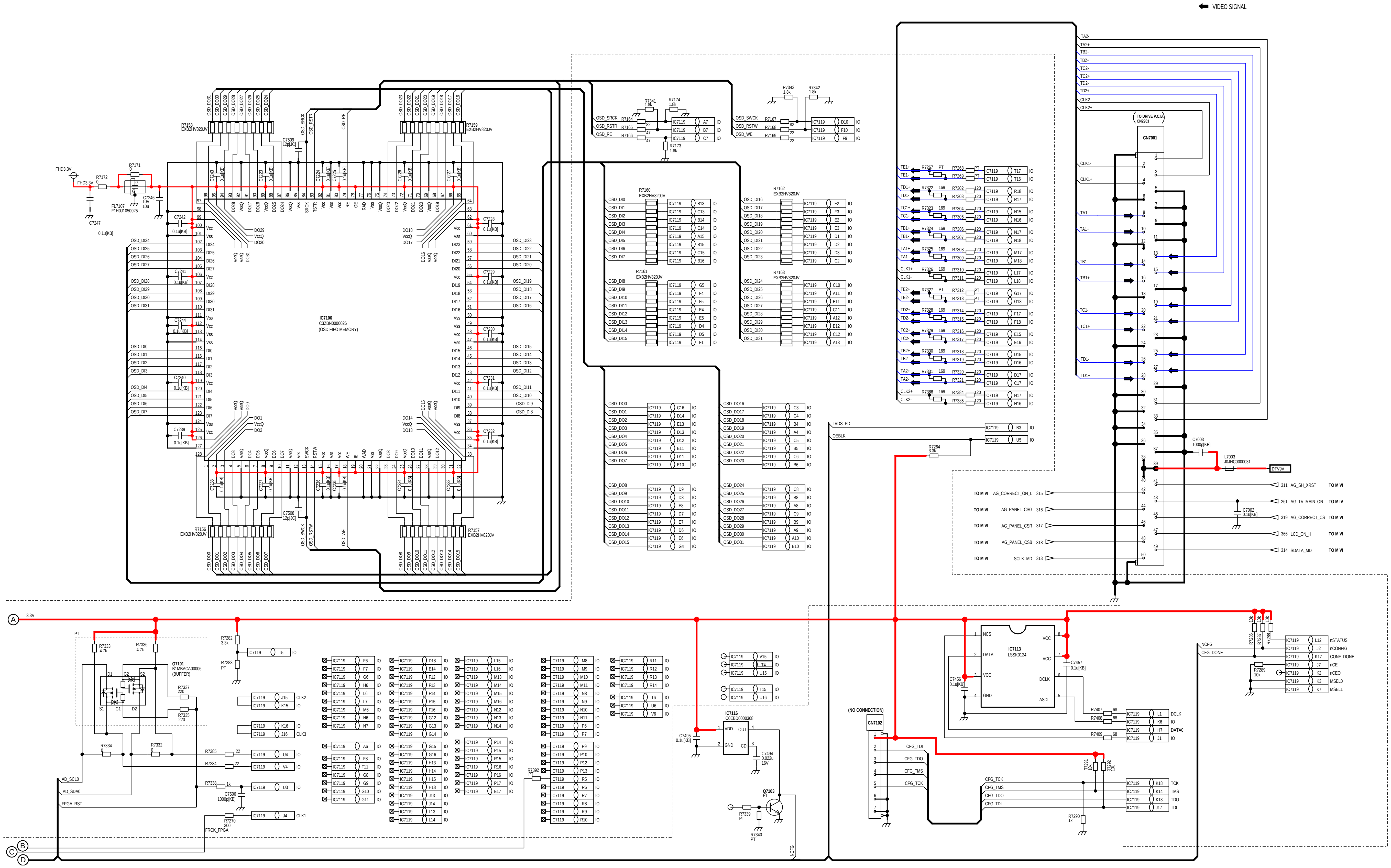
MAIN X SCHEMATIC DIAGRAM (2/4)
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

MAIN X SCHEMATIC DIAGRAM (3/4)


VIDEO SIGNAL
A
B
C
D
E
F
CLK_HOKEN
IC7110
C0CBCAF00031
(+2.5V REGULATOR)
Thermal Pad
IC7109
C0CBCAF00031
(+2.5V REGULATOR)
DDR3.3V
1_DDR2.5V
IC7117
C3ABQ000055
IC7119
C1ZB20003563
(LVDS TRANSMITTER)
IC7114
C0CBAAA00035
IC7111
C0DBEKG00004
(+2.5V REGULATOR)
IC7112
C0CBCYE00001
(+1.5V REGULATOR)
FHD3.3V
STAR POINT GND-2
AG_PWMA_AI
PEAKS_OSD_FLAG
PEAKS_OSDCK
LOSDOUT_H_I
LOSDOUT_V_I
LOSDOUT_CLK_I
VCCA_PLL1
GNDG_PLL1
GNDA_PLL1
VCCA_PLL2
GNDA_PLL2
GNDG_PLL2
VSS_Thermal
VDDQ
VSSQ
VDD
VSS
VREF
VCCINT
VCCIO1
VCCIO2
VCCIO3
VCCIO4
GND

MAIN X SCHEMATIC DIAGRAM (3/4)
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

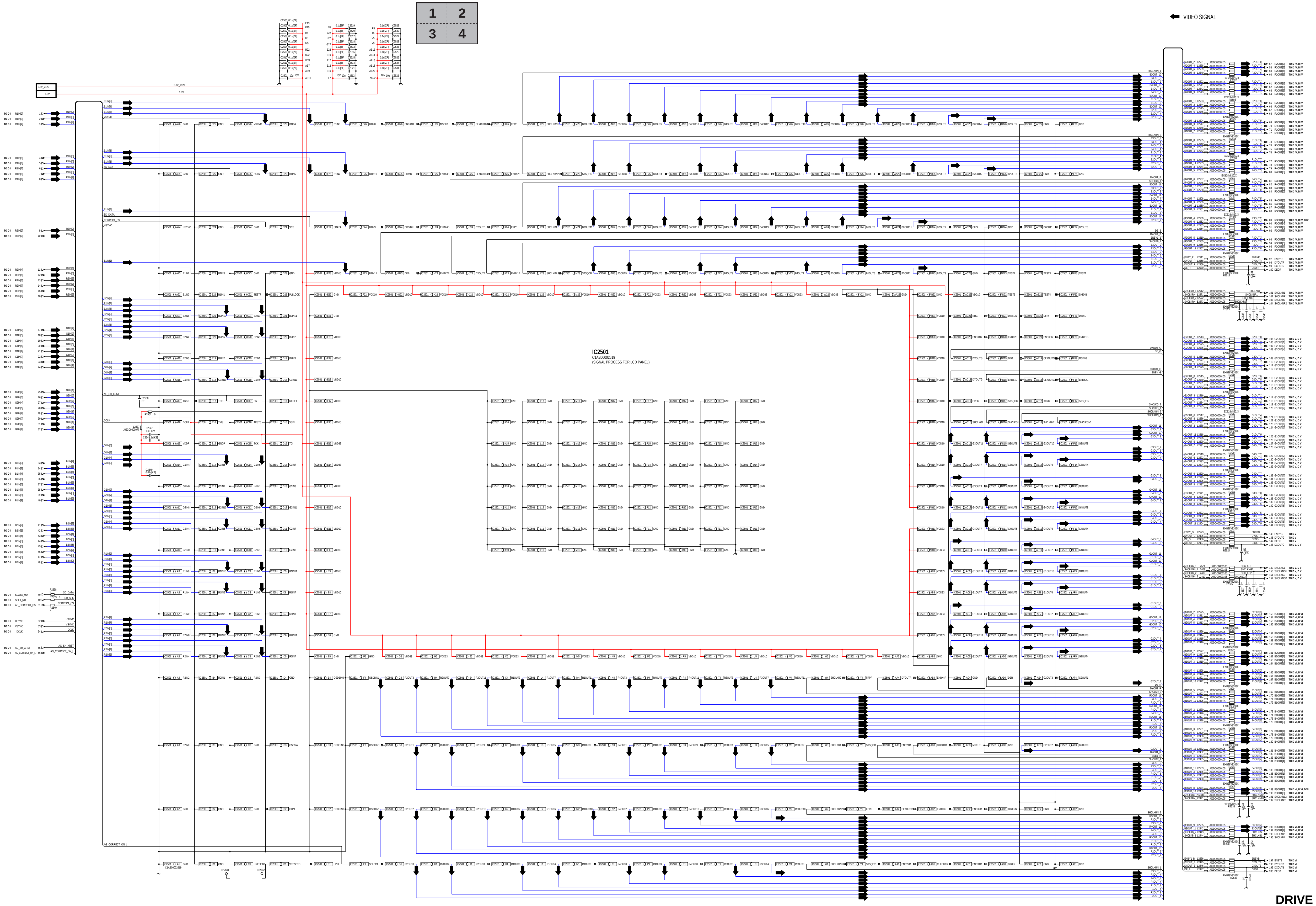
MAIN X SCHEMATIC DIAGRAM (4/4)


VIDEO SIGNAL
IC7106
C3ZBN0000026
(OSD FIFO MEMORY)
R7158 EXB2HV820JV
R7159 EXB2HV820JV
R7156 EXB2HV820JV
R7157 EXB2HV820JV
R7160 EXB2HV820JV
R7161 EXB2HV820JV
R7162 EXB2HV820JV
R7163 EXB2HV820JV
FHD3.3V
FL7107 F1H0J1050025
OSD_SRCK
OSD_RSTR
OSD_RE
OSD_SWCK
OSD_RSTW
OSD_WE
TO DRIVE P.C.B. CN2901
CN7001
DTV9V
L7003 J0JHC0000031
C7003 1000p[KB]
C7002 0.1u[KB]
LVDS_PD
OEBLK
TO M VI
AG_CORRECT_ON_L 315
AG_PANEL_CSG 316
AG_PANEL_CSR 317
AG_PANEL_CSB 318
SCLK_MD 313
311 AG_SH_XRST
261 AG_TV_MAIN_ON
319 AG_CORRECT_CS
366 LCD_ON_H
314 SDATA_MD
3.3V
Q7101
B1MBACA00006
(BUFFER)
AD_SCL0
AD_SDA0
FPGA_RST
FRCK_FPGA
IC7116
C0EBD0000368
Q7103
IC7113
LSSK0124
NCS
DATA
VCC
GND
DCLK
ASDI
(NO CONNECTION)
CN7102
CFG_TDI
CFG_TDO
CFG_TMS
CFG_TCK
NCFG
CFG_DONE
nSTATUS
nCONFIG
CONF_DONE
nCE
nCEO
MSEL0
MSEL1
DCLK
DATA0
TCK
TMS
TDO
TDI
A
B
C
D

MAIN X SCHEMATIC DIAGRAM (4/4)
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

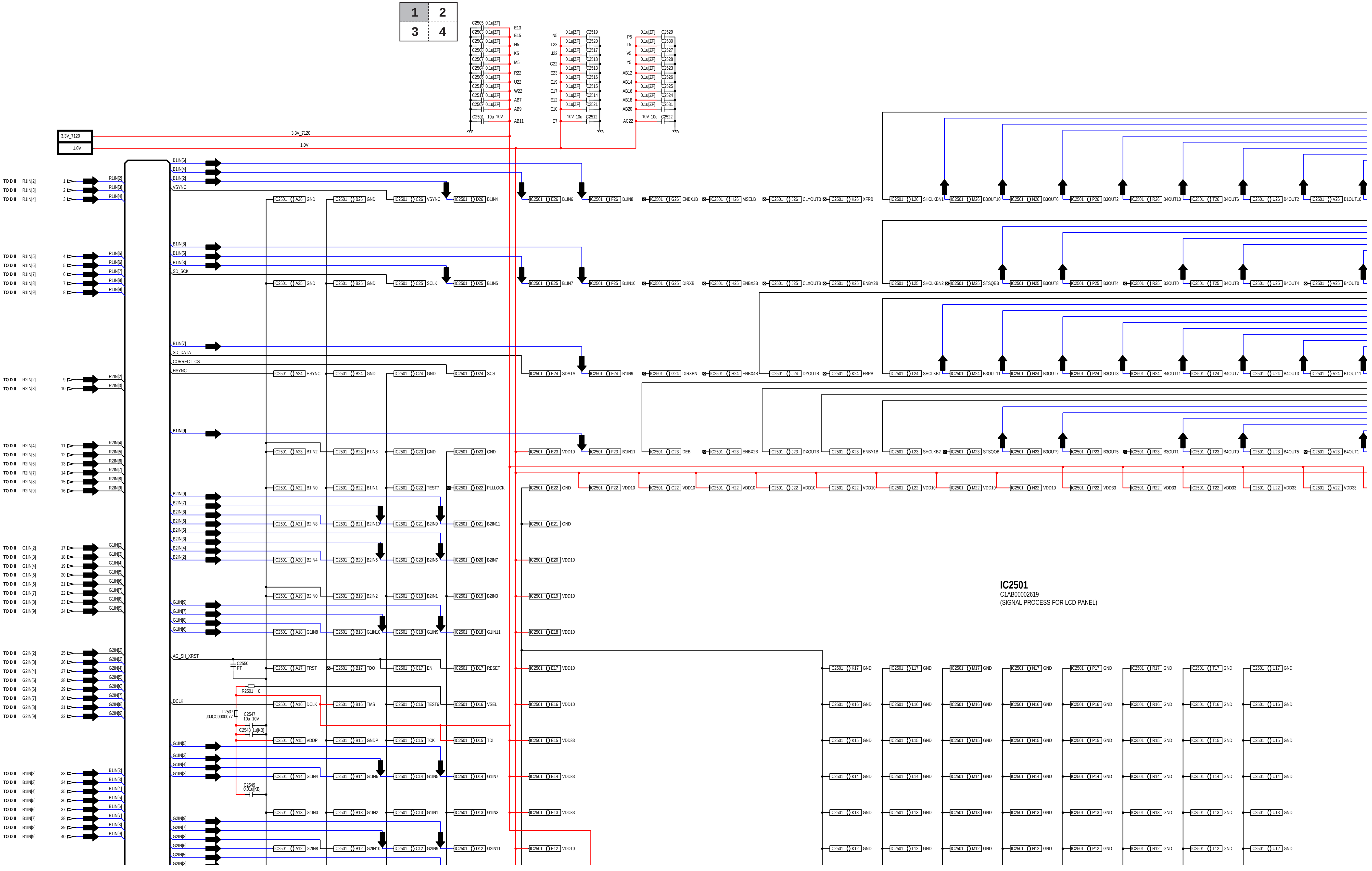
9.3. DRIVE SCHEMATIC DIAGRAMS

DRIVE I SCHEMATIC DIAGRAM


1
2
3
4
VIDEO SIGNAL
IC2501
C1AB00002619
(SIGNAL PROCESS FOR LCD PANEL)

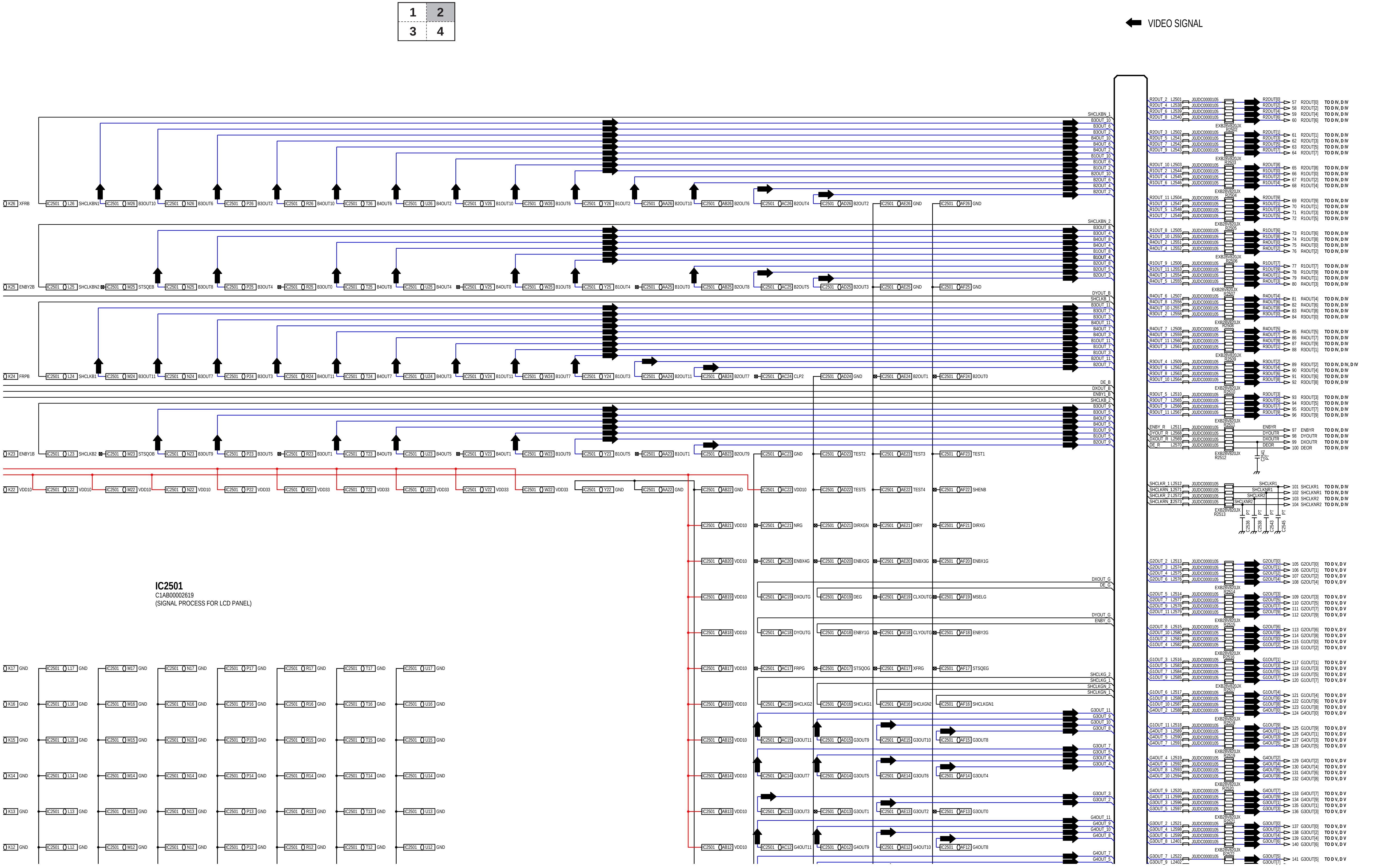
DRIVE I SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

DRIVE I SCHEMATIC DIAGRAM


1
2
3
4
3.3V_7120
1.0V
TO D II R1IN[2]
TO D II R1IN[3]
TO D II R1IN[4]
TO D II R1IN[5]
TO D II R1IN[6]
TO D II R1IN[7]
TO D II R1IN[8]
TO D II R1IN[9]
TO D II R2IN[2]
TO D II R2IN[3]
TO D II R2IN[4]
TO D II R2IN[5]
TO D II R2IN[6]
TO D II R2IN[7]
TO D II R2IN[8]
TO D II R2IN[9]
TO D II G1IN[2]
TO D II G1IN[3]
TO D II G1IN[4]
TO D II G1IN[5]
TO D II G1IN[6]
TO D II G1IN[7]
TO D II G1IN[8]
TO D II G1IN[9]
TO D II G2IN[2]
TO D II G2IN[3]
TO D II G2IN[4]
TO D II G2IN[5]
TO D II G2IN[6]
TO D II G2IN[7]
TO D II G2IN[8]
TO D II G2IN[9]
TO D II B1IN[2]
TO D II B1IN[3]
TO D II B1IN[4]
TO D II B1IN[5]
TO D II B1IN[6]
TO D II B1IN[7]
TO D II B1IN[8]
TO D II B1IN[9]
VSYNC
SD_SCK
SD_DATA
CORRECT_CS
HSYNC
AG_SH_XRST
DCLK
C2550
R2501 0
L2537 J0JCC0000077
C2547 10u 10V
C2548 1u[KB]
C2549 0.01u[KB]
C2505 0.1u[ZF]
C2501 10u 10V
C2512 10V 10u
C2522 10V 10u
IC2501
C1AB00002619
(SIGNAL PROCESS FOR LCD PANEL)

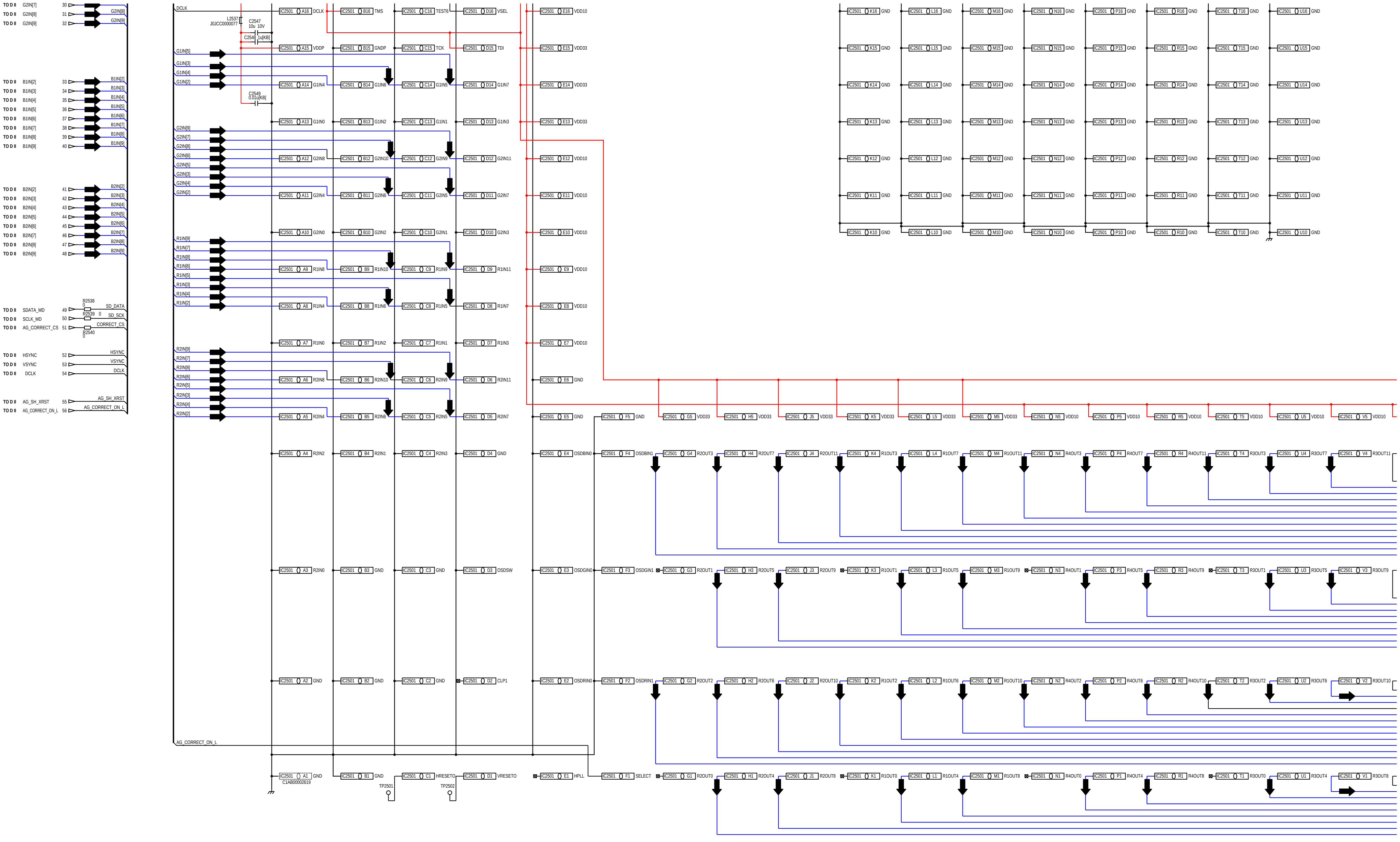
DRIVE I SCHEMATIC DIAGRAM

1	2
3	4


VIDEO SIGNAL
IC2501
C1AB00002619
(SIGNAL PROCESS FOR LCD PANEL)

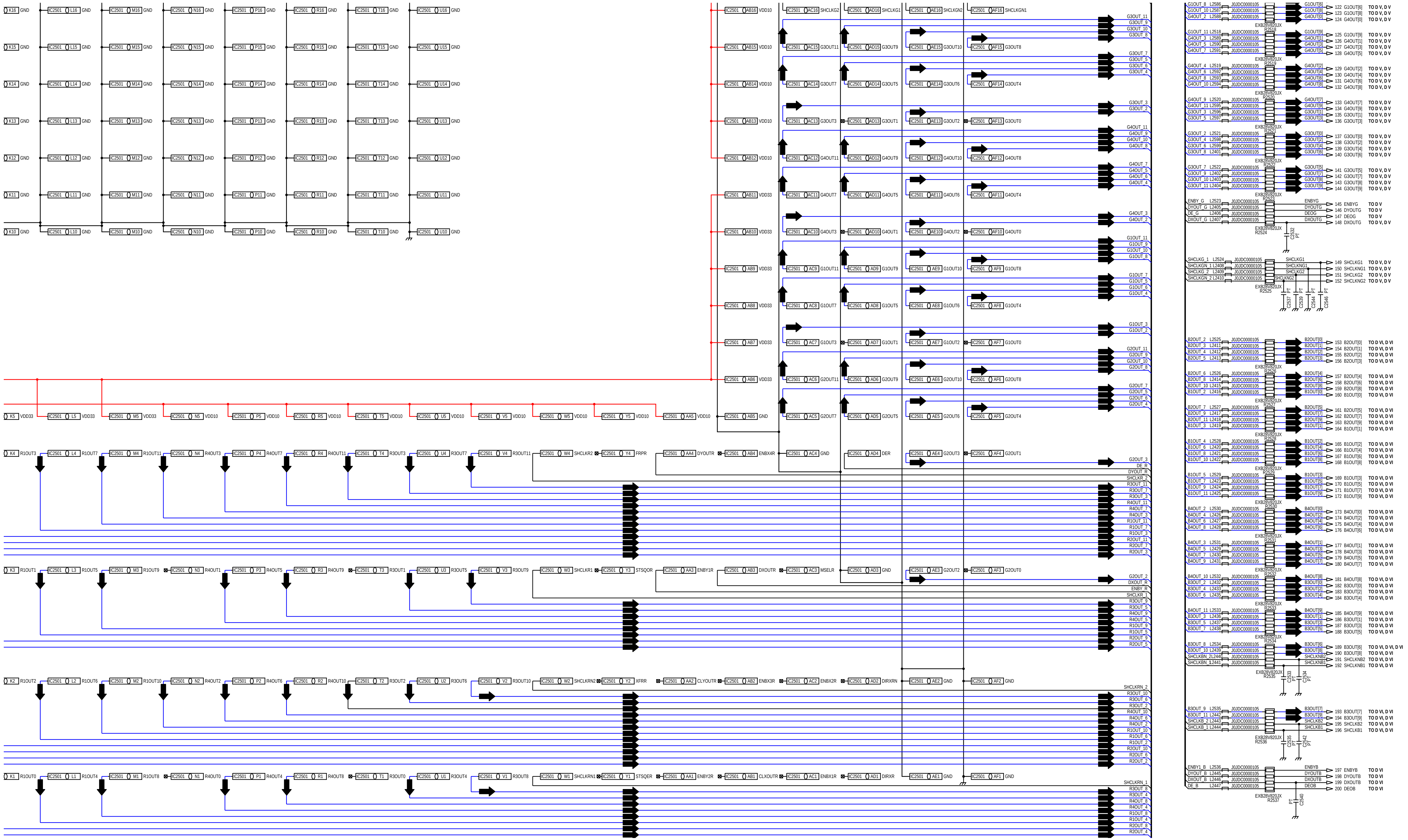
DRIVE I SCHEMATIC DIAGRAM

1	2
3	4

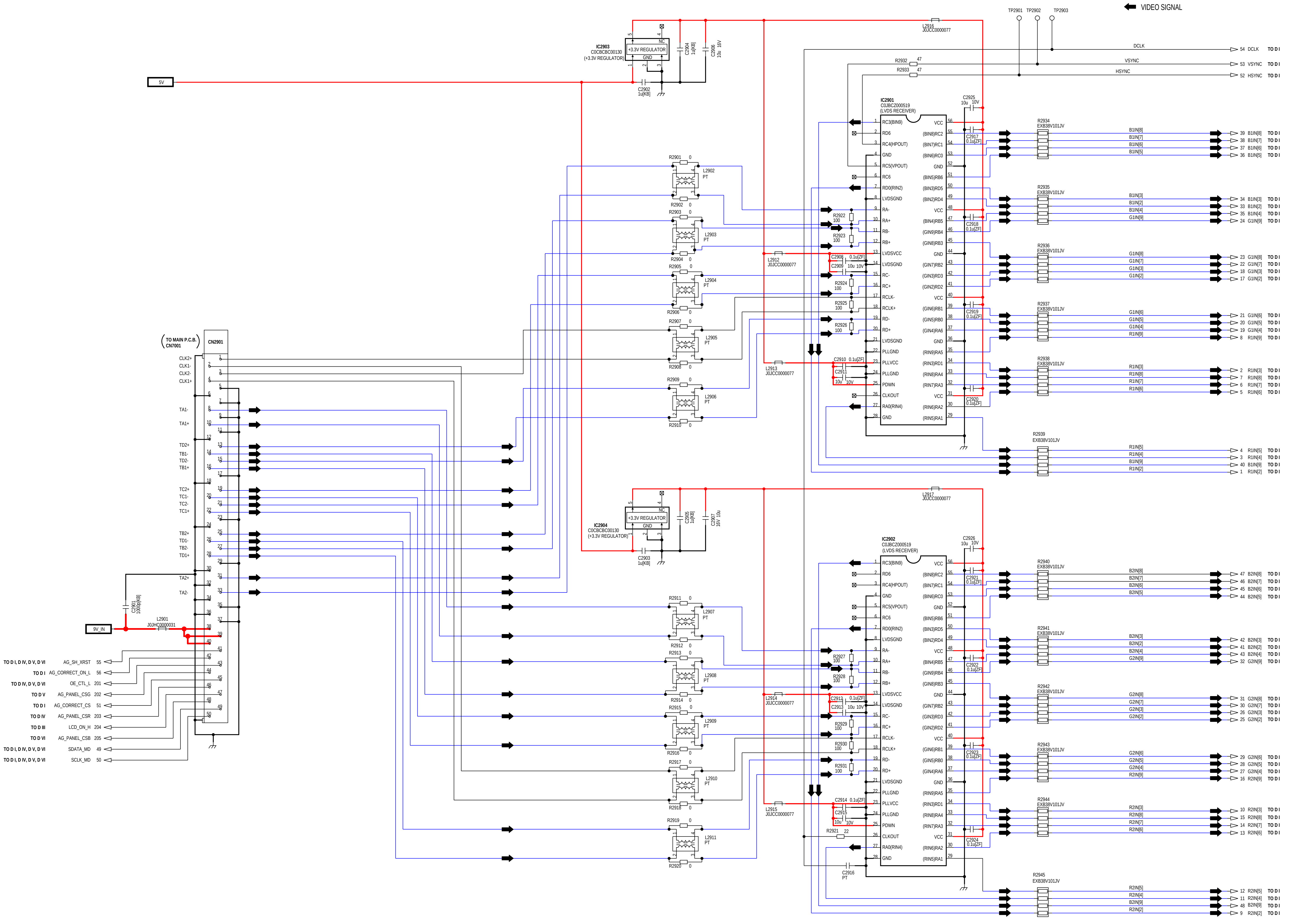

TO D II G2IN[7] 30
TO D II G2IN[8] 31
TO D II G2IN[9] 32
TO D II B1IN[2] 33
TO D II B1IN[3] 34
TO D II B1IN[4] 35
TO D II B1IN[5] 36
TO D II B1IN[6] 37
TO D II B1IN[7] 38
TO D II B1IN[8] 39
TO D II B1IN[9] 40
TO D II B2IN[2] 41
TO D II B2IN[3] 42
TO D II B2IN[4] 43
TO D II B2IN[5] 44
TO D II B2IN[6] 45
TO D II B2IN[7] 46
TO D II B2IN[8] 47
TO D II B2IN[9] 48
TO D II SDATA_MD 49
TO D II SCLK_MD 50
TO D II AG_CORRECT_CS 51
TO D II HSYNC 52
TO D II VSYNC 53
TO D II DCLK 54
TO D II AG_SH_XRST 55
TO D II AG_CORRECT_ON_L 56
R2538
R2539
R2540
SD_DATA
SD_SCK
CORRECT_CS
HSYNC
VSYNC
DCLK
AG_SH_XRST
AG_CORRECT_ON_L
L2537
J0JCC0000077
C2547
10u 10V
C2548 1u(KB)
C2549
0.01u(KB)
IC2501
C1AB00002619
TP2501
TP2502
DCLK
TMS
TEST6
VSEL
VDD10
VDDP
GNDP
TCK
TDI
VDD33
GND
OSDBIN0
OSDBIN1
OSDGIN0
OSDGIN1
OSDRIN0
OSDRIN1
OSDSW
CLP1
HRESET0
VRESET0
HPLL
SELECT

DRIVE I SCHEMATIC DIAGRAM

1	2
3	4

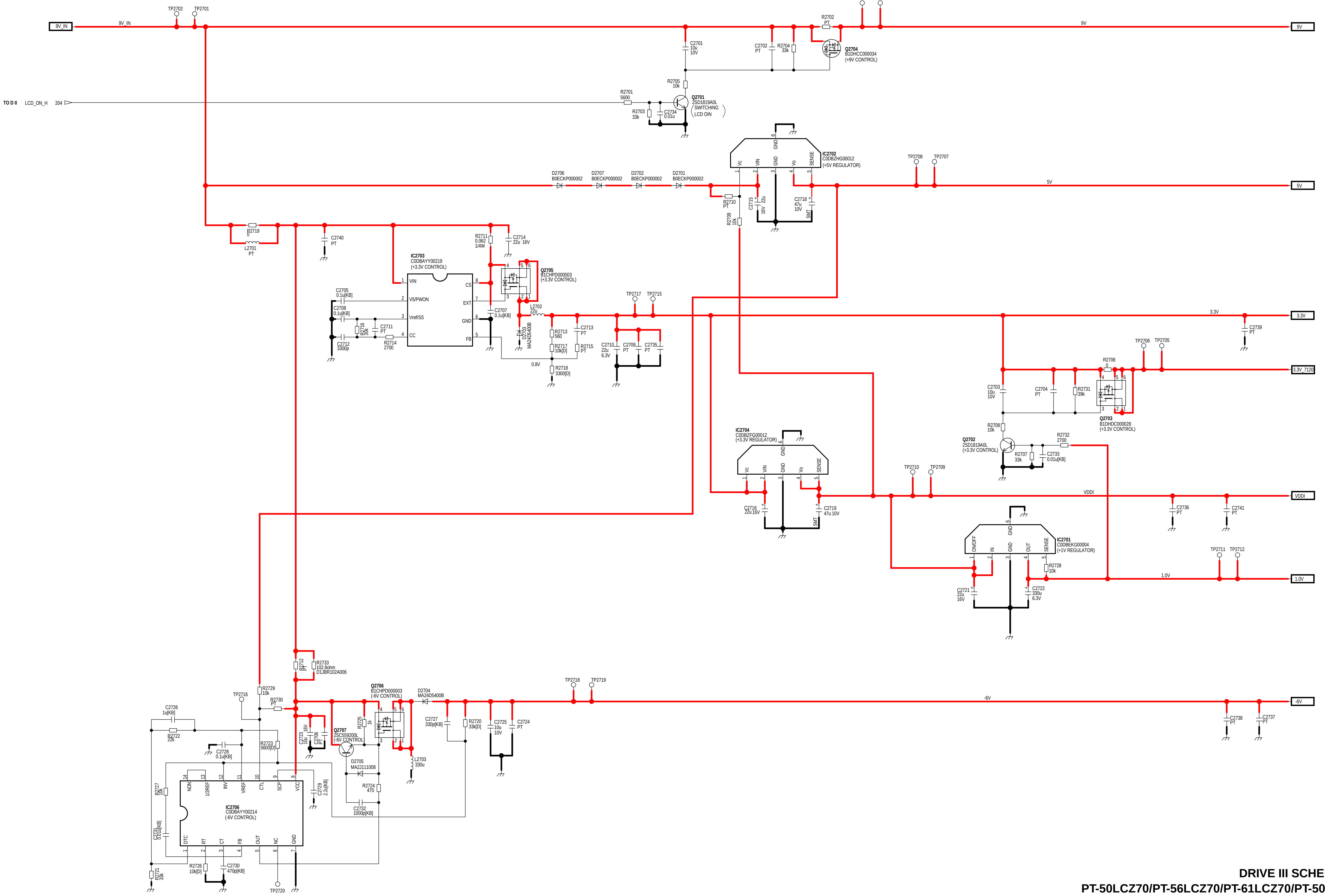

IC2501
GND
VDD33
VDD10
EXB28V820JX
J0JDC0000105
TO DV, DV
TO DVI, DVI

DRIVE II SCHEMATIC DIAGRAM


VIDEO SIGNAL
TP2901
TP2902
TP2903
5V
9V_IN
IC2903
C0CBCBC00130
(+3.3V REGULATOR)
+3.3V REGULATOR
GND
NC
C2902
1u[KB]
C2904
1u[KB]
C2906
10u 16V
L2916
J0JCC0000077
IC2904
C0CBCBC00130
(+3.3V REGULATOR)
C2903
1u[KB]
C2905
1u[KB]
C2907
16V 10u
L2917
J0JCC0000077
TO MAIN P.C.B.
CN7001
CN2901
CLK2+
CLK1-
CLK2-
CLK1+
TA1-
TA1+
TD2+
TB1-
TD2-
TB1+
TC2+
TC1-
TC2-
TC1+
TB2+
TD1-
TB2-
TD1+
TA2+
TA2-
C2901
1000p[KB]
L2901
J0JHC0000031
TO D I, D IV, D V, D VI AG_SH_XRST 55
TO D I AG_CORRECT_ON_L 56
TO D IV, D V, D VI OE_CTL_L 201
TO D V AG_PANEL_CSG 202
TO D I AG_CORRECT_CS 51
TO D IV AG_PANEL_CSR 203
TO D III LCD_ON_H 204
TO D VI AG_PANEL_CSB 205
TO D I, D IV, D V, D VI SDATA_MD 49
TO D I, D IV, D V, D VI SCLK_MD 50
R2901 0
L2902 PT
R2902 0
R2903 0
L2903 PT
R2904 0
R2905 0
L2904 PT
R2906 0
R2907 0
L2905 PT
R2908 0
R2909 0
L2906 PT
R2910 0
R2911 0
L2907 PT
R2912 0
R2913 0
L2908 PT
R2914 0
R2915 0
L2909 PT
R2916 0
R2917 0
L2910 PT
R2918 0
R2919 0
L2911 PT
R2920 0
L2912
J0JCC0000077
L2913
J0JCC0000077
L2914
J0JCC0000077
L2915
J0JCC0000077
DCLK
VSYNC
HSYNC
R2932 47
R2933 47
54 DCLK TO D I
53 VSYNC TO D I
52 HSYNC TO D I
IC2901
C0JBCZ000519
(LVDS RECEIVER)
1 RC3(BIN9)
2 RD6
3 RC4(HPOUT)
4 GND
5 RC5(VPOUT)
6 RC6
7 RD0(RIN2)
8 LVDSGND
9 RA-
10 RA+
11 RB-
12 RB+
13 LVDSVCC
14 LVDSGND
15 RC-
16 RC+
17 RCLK-
18 RCLK+
19 RD-
20 RD+
21 LVDSGND
22 PLLGND
23 PLLVCC
24 PLLGND
25 PDWN
26 CLKOUT
27 RA0(RIN4)
28 GND
56 VCC
55 (BIN8)RC2
54 (BIN7)RC1
53 (BIN6)RC0
52 GND
51 (BIN5)RB6
50 (BIN3)RD5
49 (BIN2)RD4
48 VCC
47 (BIN4)RB5
46 (GIN9)RB4
45 (GIN8)RB3
44 GND
43 (GIN7)RB2
42 (GIN3)RD3
41 (GIN2)RD2
40 VCC
39 (GIN6)RB1
38 (GIN5)RB0
37 (GIN4)RA6
36 GND
35 (RIN9)RA5
34 (RIN3)RD1
33 (RIN8)RA4
32 (RIN7)RA3
31 VCC
30 (RIN6)RA2
29 (RIN5)RA1
R2922 100
R2923 100
R2924 100
R2925 100
R2926 100
C2908 0.1u[ZF]
C2909 10u 10V
C2910 0.1u[ZF]
C2911 10u 10V
C2925 10u 10V
C2917 0.1u[ZF]
C2918 0.1u[ZF]
C2919 0.1u[ZF]
C2920 0.1u[ZF]
R2934 EXB38V101JV
R2935 EXB38V101JV
R2936 EXB38V101JV
R2937 EXB38V101JV
R2938 EXB38V101JV
R2939 EXB38V101JV
39 B1IN[8] TO D I
38 B1IN[7] TO D I
37 B1IN[6] TO D I
36 B1IN[5] TO D I
34 B1IN[3] TO D I
33 B1IN[2] TO D I
35 B1IN[4] TO D I
24 G1IN[9] TO D I
23 G1IN[8] TO D I
22 G1IN[7] TO D I
18 G1IN[3] TO D I
17 G1IN[2] TO D I
21 G1IN[6] TO D I
20 G1IN[5] TO D I
19 G1IN[4] TO D I
8 R1IN[9] TO D I
2 R1IN[3] TO D I
7 R1IN[8] TO D I
6 R1IN[7] TO D I
5 R1IN[6] TO D I
4 R1IN[5] TO D I
3 R1IN[4] TO D I
40 B1IN[9] TO D I
1 R1IN[2] TO D I
IC2902
C0JBCZ000519
(LVDS RECEIVER)
R2927 100
R2928 100
R2929 100
R2930 100
R2931 100
C2912 0.1u[ZF]
C2913 10u 10V
C2914 0.1u[ZF]
C2915 10u 10V
C2916 PT
R2921 22
C2926 10u 10V
C2921 0.1u[ZF]
C2922 0.1u[ZF]
C2923 0.1u[ZF]
C2924 0.1u[ZF]
R2940 EXB38V101JV
R2941 EXB38V101JV
R2942 EXB38V101JV
R2943 EXB38V101JV
R2944 EXB38V101JV
R2945 EXB38V101JV
47 B2IN[8] TO D I
46 B2IN[7] TO D I
45 B2IN[6] TO D I
44 B2IN[5] TO D I
42 B2IN[3] TO D I
41 B2IN[2] TO D I
43 B2IN[4] TO D I
32 G2IN[9] TO D I
31 G2IN[8] TO D I
30 G2IN[7] TO D I
26 G2IN[3] TO D I
25 G2IN[2] TO D I
29 G2IN[6] TO D I
28 G2IN[5] TO D I
27 G2IN[4] TO D I
16 R2IN[9] TO D I
10 R2IN[3] TO D I
15 R2IN[8] TO D I
14 R2IN[7] TO D I
13 R2IN[6] TO D I
12 R2IN[5] TO D I
11 R2IN[4] TO D I
48 B2IN[9] TO D I
9 R2IN[2] TO D I

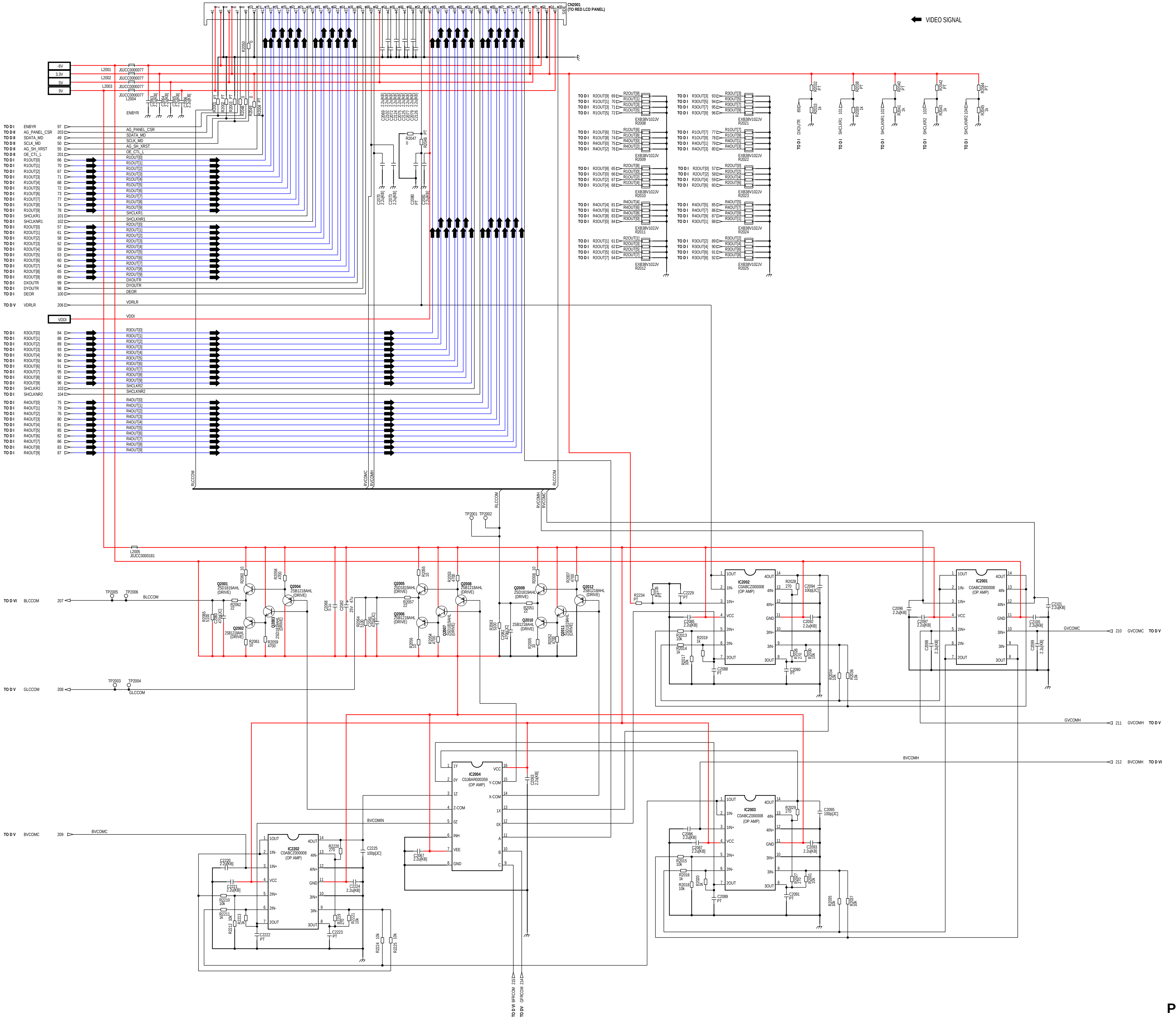
DRIVE II SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

DRIVE III SCHEMATIC DIAGRAM


9V_IN
TP2702
TP2701
TP2704
TP2703
R2702 PT
9V
C2701 10u 10V
C2702 PT
R2704 33k
Q2704 B1DHCC000034 (+9V CONTROL)
R2705 10k
R2701 5600
Q2701 2SD1819A0L (SWITCHING LCD ON)
R2703 33k
C2734 0.01u
TO D II
LCD_ON_H
204
IC2702 C0DBZHG00012 (+5V REGULATOR)
Vc
VIN
GND
Vo
SENSE
D2706 B0ECKP000002
D2707 B0ECKP000002
D2702 B0ECKP000002
D2701 B0ECKP000002
TP2708
TP2707
5V
R2710 PT
R2709 10k
C2715 22u 16V
C2718 47u 10V
SMT
R2719 0
L2701 PT
C2740 PT
R2711 0.062 1/4W
C2714 22u 16V
IC2703 C0DBAYY00219 (+3.3V CONTROL)
VIN
V5/PWON
Vref/SS
CC
CS
EXT
GND
FB
Q2705 B1CHPD000003 (+3.3V CONTROL)
C2705 0.1u[KB]
C2708 0.1u[KB]
R2716 82k
C2711 PT
C2712 3300p
R2714 2700
C2707 0.1u[KB]
L2702 22u
D2703 MA2YD5400B
R2713 560
C2713 PT
R2717 10k[D]
R2715 PT
R2718 3300[D]
0.8V
TP2717
TP2715
C2710 22u 6.3V
C2709 PT
C2735 PT
3.3V
C2739 PT
TP2706
TP2705
R2706 0
3.3V_7120
C2703 10u 10V
C2704 PT
R2731 39k
Q2703 B1DHDC000028 (+3.3V CONTROL)
R2708 10k
Q2702 2SD1819A0L (+3.3V CONTROL)
R2707 33k
C2733 0.01u[KB]
R2732 2700
IC2704 C0DBZFG00012 (+3.3V REGULATOR)
TP2710
TP2709
VDDI
C2716 22u 16V
C2719 47u 10V
C2736 PT
C2741 PT
IC2701 C0DBEKG00004 (+1V REGULATOR)
ON/OFF
IN
GND
OUT
SENSE
R2728 10k
C2721 22u 16V
C2722 330u 6.3V
TP2711
TP2712
1.0V
R2712 PT
R2733 102.8ohm D1J8R102A006
R2729 10k
TP2716
R2730 PT
C2726 1u[KB]
R2722 22k
C2728 0.1u[KB]
R2723 5600[D]
C2723 10u 16V
C2706 PT
Q2707 2SC559200L (-6V CONTROL)
R2725 1k
Q2706 B1CHPD000003 (-6V CONTROL)
D2704 MA2YD5400B
D2705 MA2J111008
L2703 330u
R2724 470
C2732 1000p[KB]
C2727 330p[KB]
R2720 33k[D]
C2725 10u 10V
C2724 PT
TP2718
TP2719
-6V
C2738 PT
C2737 PT
R2727 10k
C2731 0.047u[KB]
IC2706 C0DBAYY00214 (-6V CONTROL)
NON
1/2REF
INV
VREF
CTL
SCP
VCC
DTC
RT
CT
FB
OUT
NC
GND
C2729 2.2u[KB]
R2721 33k
R2726 10k[D]
C2730 470p[KB]
TP2720

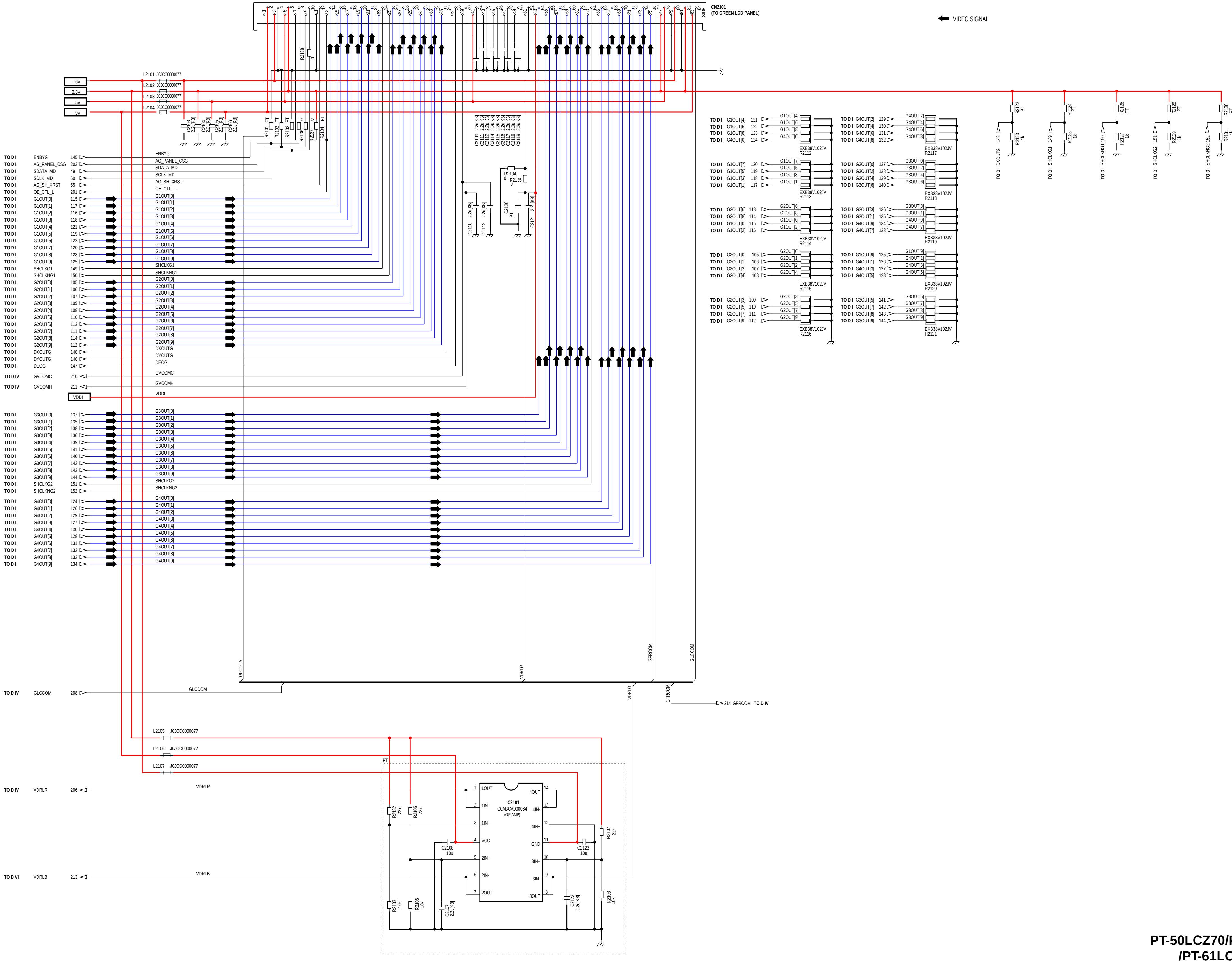
DRIVE III SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

DRIVE IV SCHEMATIC DIAGRAM


CN2001
(TO RED LCD PANEL)
VIDEO SIGNAL
IC2001
IC2002
IC2003
IC2004
IC2202
TO D VI BLCCOM
TO D V GLCCOM
TO D V BVCOMC
GVCOMC
GVCOMH
BVCOMH
VDRLR
VDDI

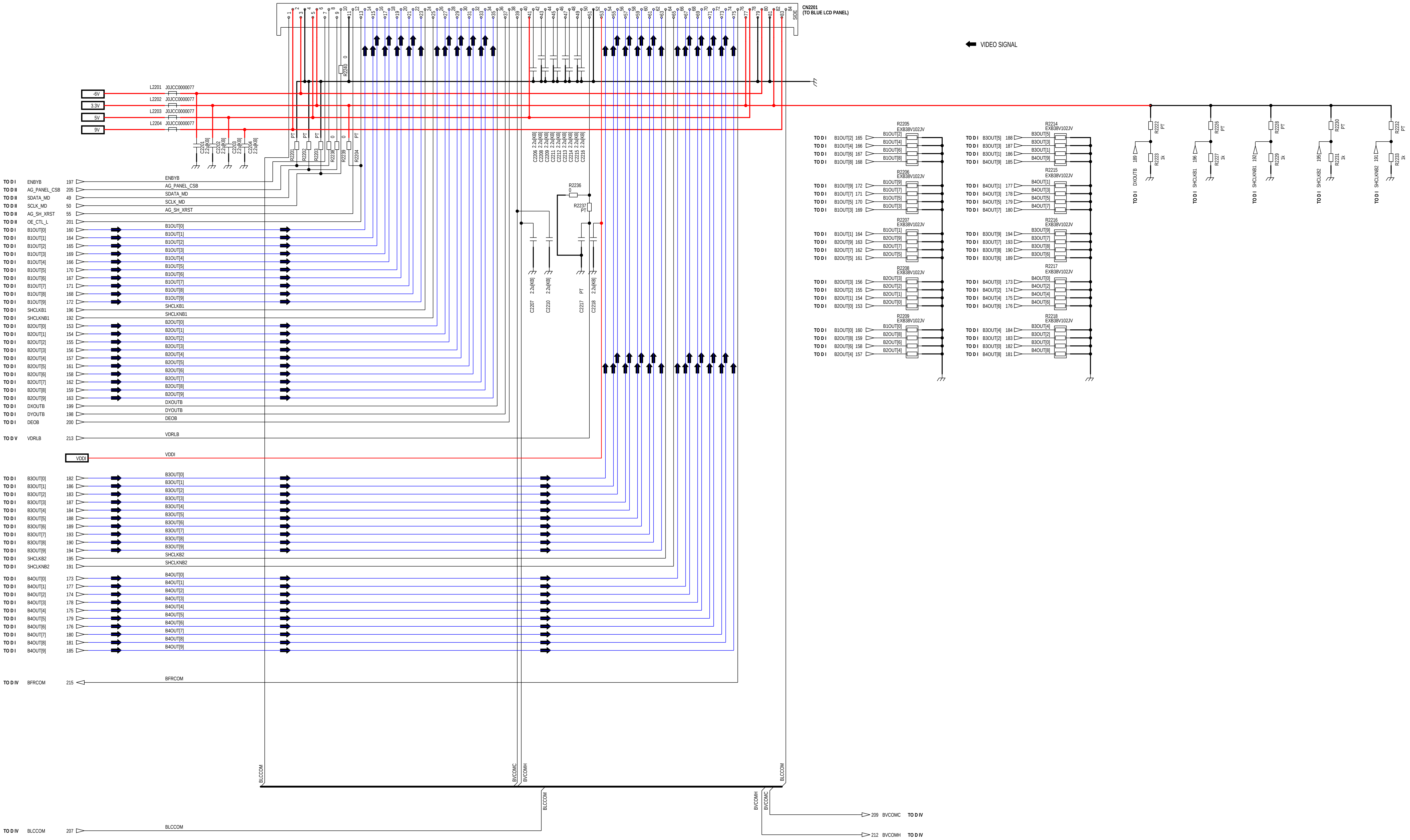
DRIVE IV SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

DRIVE V SCHEMATIC DIAGRAM


CN2101
(TO GREEN LCD PANEL)
VIDEO SIGNAL
-6V
3.3V
5V
9V
VDDI
L2101 J0JCC0000077
L2102 J0JCC0000077
L2103 J0JCC0000077
L2104 J0JCC0000077
L2105 J0JCC0000077
L2106 J0JCC0000077
L2107 J0JCC0000077
ENBYG
AG_PANEL_CSG
SDATA_MD
SCLK_MD
AG_SH_XRST
OE_CTL_L
SHCLKG1
SHCLKNG1
SHCLKG2
SHCLKNG2
DXOUTG
DYOUTG
DEOG
GVCOMC
GVCOMH
GLCCOM
GFRCOM
VDRLG
VDRLR
VDRLB
TO D I
TO D II
TO D IV
TO D VI
214 GFRCOM TO D IV
EXB38V102JV
IC2101
C0ABCA000064
(OP AMP)
1OUT
1IN-
1IN+
VCC
2IN+
2IN-
2OUT
4OUT
4IN-
4IN+
GND
3IN+
3IN-
3OUT
C2108 10u
C2123 10u
C2107 2.2u(KB)
C2122 2.2u(KB)
R2132 22k
R2105 22k
R2107 22k
R2133 10k
R2106 10k
R2108 10k
R2134 0
R2135 0
C2120 PT
C2121 2.2u(KB)
C2110 2.2u(KB)
C2113 2.2u(KB)
PT

DRIVE V SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

DRIVE VI SCHEMATIC DIAGRAM


CN2201
(TO BLUE LCD PANEL)
VIDEO SIGNAL
-6V
3.3V
5V
9V
L2201 J0JCC0000077
L2202 J0JCC0000077
L2203 J0JCC0000077
L2204 J0JCC0000077
R2240 0
R2201 PT
R2202 PT
R2203 PT
R2238 0
R2239 0
R2204 PT
R2236 0
R2237 PT
C2207 2.2u(KB)
C2210 2.2u(KB)
C2217 PT
C2218 2.2u(KB)
TO D I ENBYB 197
TO D II AG_PANEL_CSB 205
TO D II SDATA_MD 49
TO D II SCLK_MD 50
TO D II AG_SH_XRST 55
TO D II OE_CTL_L 201
SHCLKB1
SHCLKNB1
DXOUTB
DYOUTB
DEOB
TO D V VDRLB 213
VDDI
SHCLKB2
SHCLKNB2
TO D IV BFRCOM 215
BLCCOM
BVCOMC
BVCOMH
209 BVCOMC TO D IV
212 BVCOMH TO D IV
TO D IV BLCCOM 207
R2205 EXB38V102JV
R2206 EXB38V102JV
R2207 EXB38V102JV
R2208 EXB38V102JV
R2209 EXB38V102JV
R2214 EXB38V102JV
R2215 EXB38V102JV
R2216 EXB38V102JV
R2217 EXB38V102JV
R2218 EXB38V102JV
R2222 PT
R2223 1k
R2226 PT
R2227 1k
R2228 PT
R2229 1k
R2230 PT
R2231 1k
R2232 PT
R2233 1k
TO D I DXOUTB 199
TO D I SHCLKB1 196
TO D I SHCLKNB1 192
TO D I SHCLKB2 195
TO D I SHCLKNB2 191

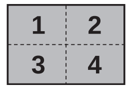
DRIVE VI SCHEMATIC DIAGRAM
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

10 Printed Circuit Board

10.1. MAIN P.C.B.

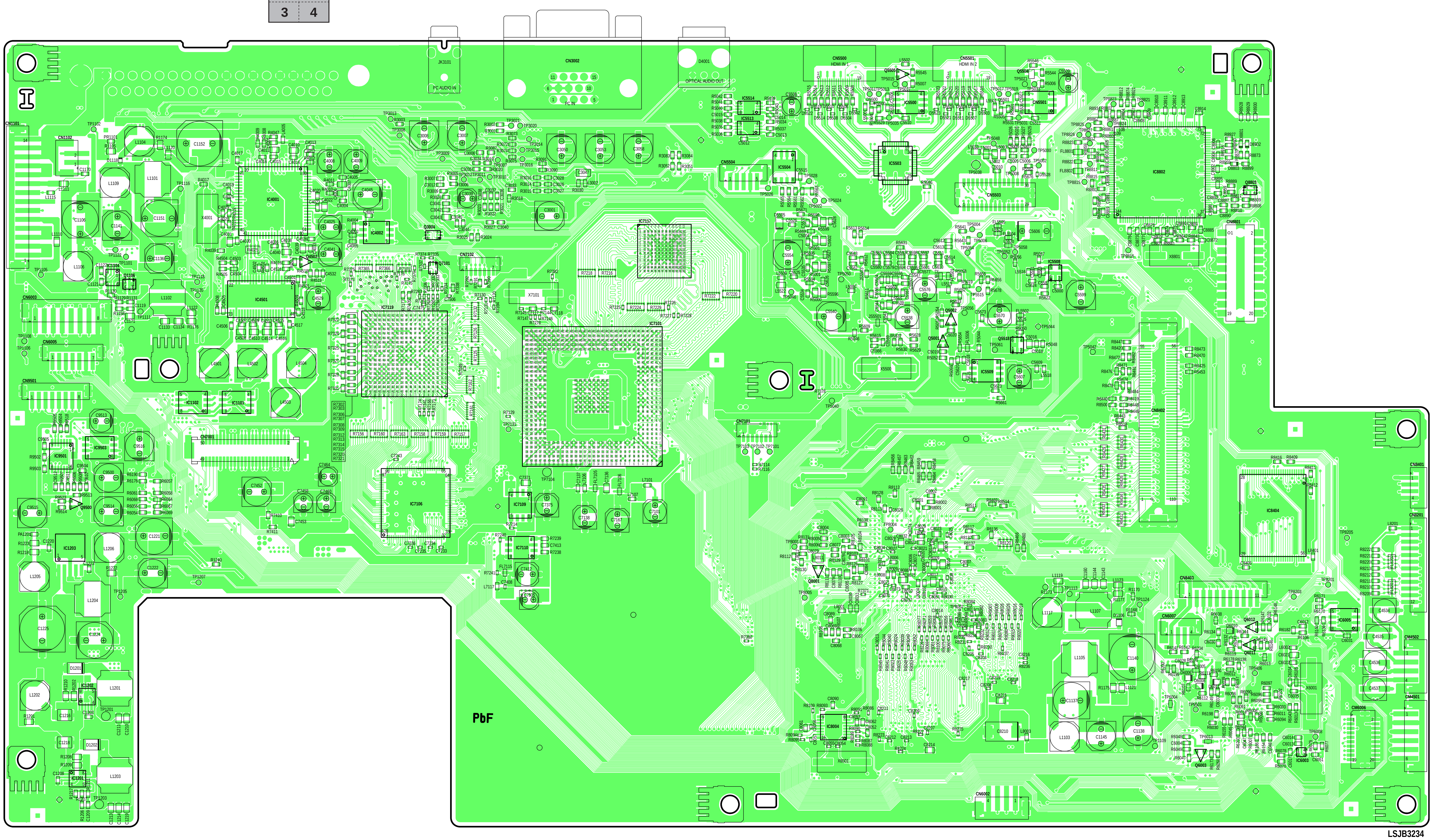
MAIN P.C.B. LSEP3234A

(COMPONENT SIDE)



NOTE: MULTILAYER P.C.B.

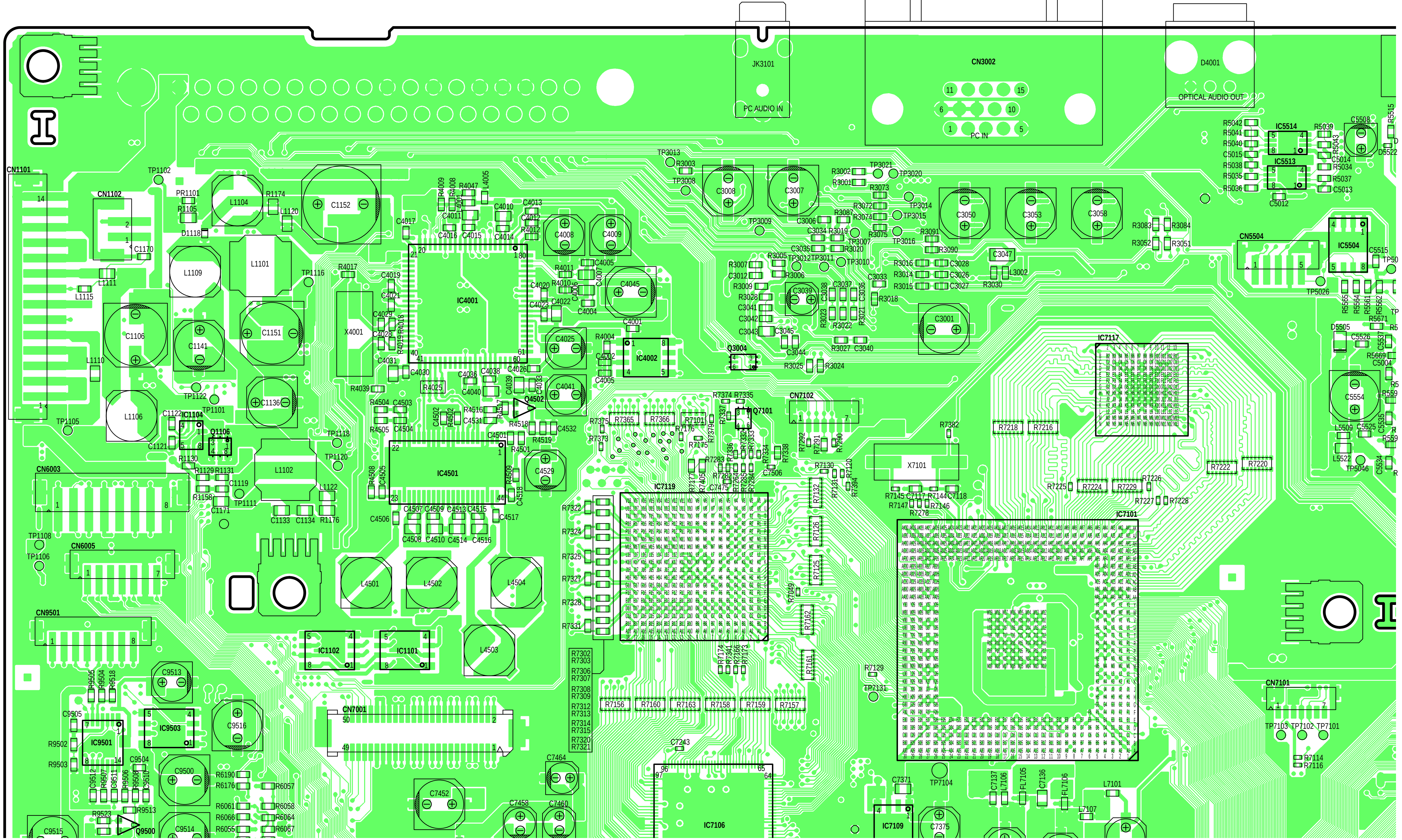
THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.


PC AUDIO IN
JK3101
CN3002
PC IN
D4001
OPTICAL AUDIO OUT
CN5500
HDMI IN 1
CN5501
HDMI IN 2
IC4001
IC4501
IC7117
IC7118
IC7101
IC7106
IC8802
IC8404
IC5503
IC5500
CN1101
CN1102
CN6003
CN6005
CN9501
CN7001
CN7101
CN8801
CN8402
CN8401
CN8201
CN4502
CN4501
CN6006
CN6007
CN8403
CN6002
PbF
LSJB3234

MAIN P.C.B. LSEP3234A
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

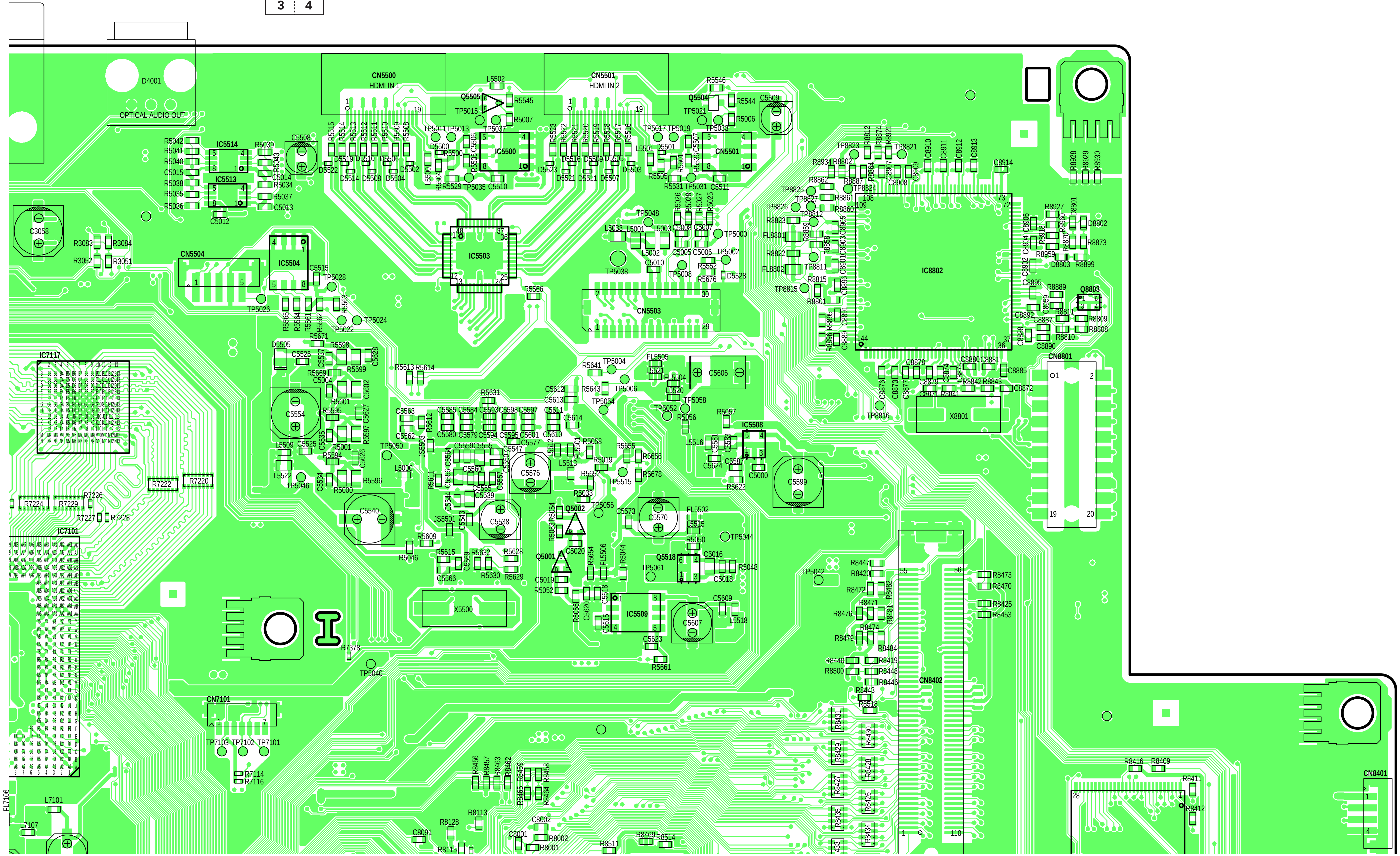
MAIN P.C.B. LSEP3234A
(COMPONENT SIDE)

1	2
3	4


JK3101
PC AUDIO IN
CN3002
11
15
6
10
1
5
PC IN
D4001
OPTICAL AUDIO OUT
CN1101
14
CN1102
TP1102
PR1101
R1105
D1118
L1104
R1174
C1120
C1152
C1170
L1111
L1115
L1109
L1101
TP1116
C1106
C1141
C1151
L1110
X4001
IC4001
R4017
C4019
C4021
C4029
C4028
C4031
C4030
R4039
R4025
TP1122
C1136
TP1101
IC1104
Q1106
L1106
TP1105
C1122
C1121
R1130
R1129
R1131
TP1118
TP1120
L1102
L1122
C1119
R1158
TP1111
C1171
C1133
C1134
R1176
CN6003
CN6005
TP1108
TP1106
IC4501
R4504
C4503
R4505
C4504
C4502
R4502
R4516
C4531
R4517
Q4502
R4518
R4519
C4532
C4501
R4501
C4529
R4508
C4505
R4509
C4518
C4506
C4507
C4509
C4513
C4515
C4517
C4508
C4510
C4514
C4516
L4501
L4502
L4504
L4503
CN9501
IC1102
IC1101
C9513
C9516
IC9503
C9505
R9502
IC9501
R9503
C9504
C9500
C9515
R9523
R9513
Q9500
C9514
CN7001
50
49
R6190
R6176
R6057
R6061
R6058
R6066
R6064
R6055
R6067
C7452
C7458
C7460
C7464
C7243
IC7106
IC7119
R7322
R7324
R7325
R7327
R7328
R7331
R7302
R7303
R7306
R7307
R7308
R7309
R7312
R7313
R7314
R7315
R7320
R7321
R7156
R7160
R7163
R7158
R7159
R7157
R7375
R7365
R7366
R7101
R7373
R7374
R7335
Q7101
CN7102
R7382
X7101
R7130
C7506
TP7131
R7129
IC7109
C7371
TP7104
C7375
L7101
L7107
IC7117
R7218
R7216
R7222
R7220
R7225
R7224
R7229
R7226
R7227
R7228
IC7101
CN7101
TP7103
TP7102
TP7101
R7114
R7116
IC4002
C4025
R4004
C4002
C4005
C4041
C4045
C4001
C4008
C4009
R4011
R4010
C4020
C4023
C4022
C4004
C4013
C4012
R4012
C4010
C4014
C4015
C4016
C4011
C4017
R4047
L4005
R4009
R4008
TP3013
R3003
TP3008
C3008
C3007
TP3009
C3006
R3002
R3001
TP3021
TP3020
R3073
R3072
R3087
R3074
R3019
R3075
TP3014
TP3015
TP3007
R3020
TP3016
R3091
R3090
C3050
C3053
C3058
C3047
L3002
R3083
R3084
R3052
R3051
R3016
C3028
R3014
C3026
R3015
C3027
R3030
C3001
R3007
C3012
R3009
R3028
C3041
C3042
C3043
C3039
C3045
C3044
Q3004
R3025
R3024
R3027
C3040
R3018
R3005
R3006
C3035
TP3012
TP3011
TP3010
C3033
C3037
R3021
R3022
R3023
R5042
R5041
R5040
C5015
R5038
R5035
R5036
IC5514
R5039
C5508
R5043
C5014
R5034
IC5513
R5037
C5013
C5012
D5522
R5515
CN5504
IC5504
C5515
TP5026
R5565
R5564
R5561
R5562
R5671
D5505
C5526
C5537
R5669
C5004
C5554
R559
L5509
C5525
C5535
L5522
TP5046
C5534

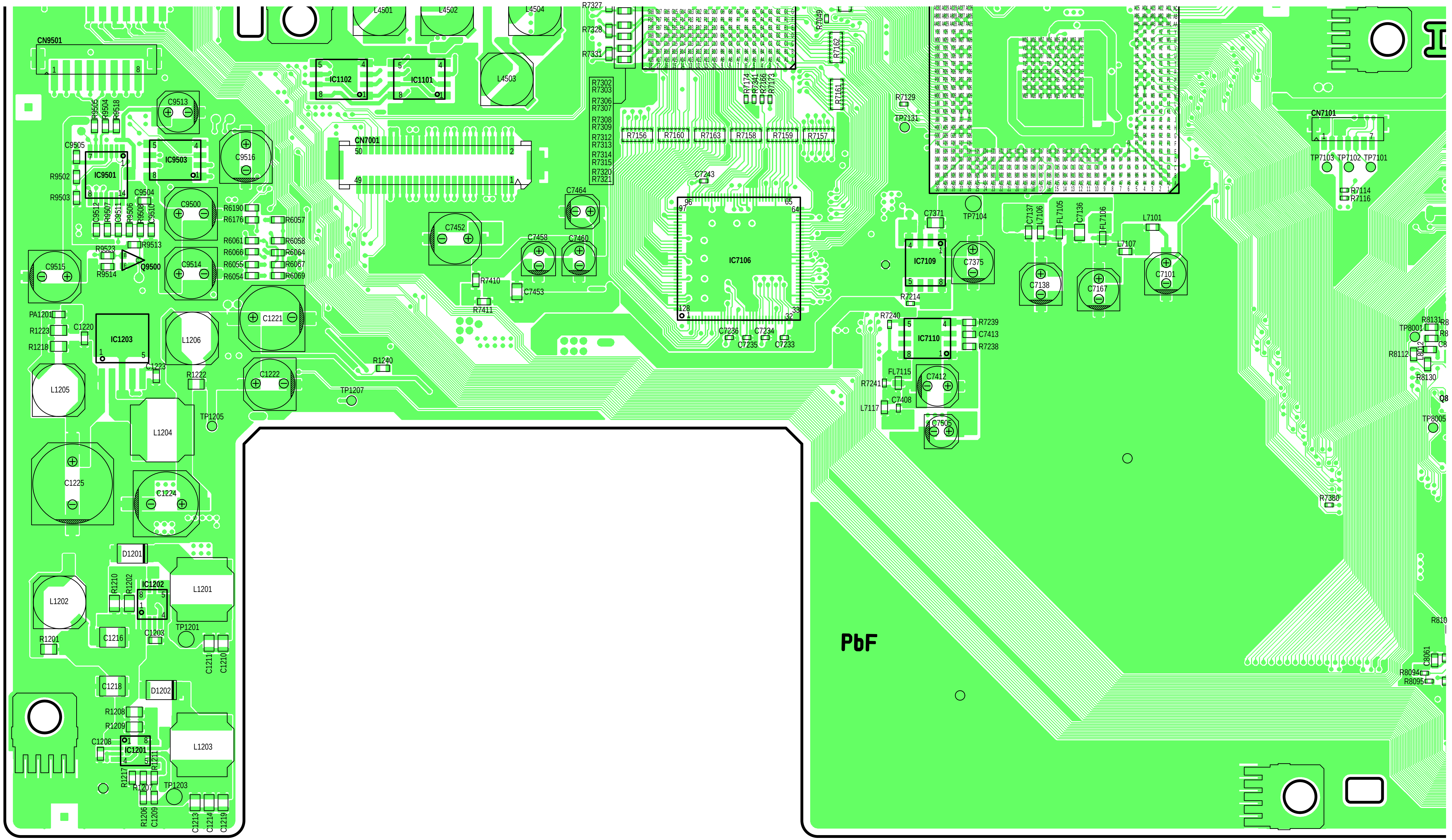
MAIN P.C.B. LSEP3234A
(COMPONENT SIDE)

1	2
3	4


D4001
OPTICAL AUDIO OUT
CN5500
HDMI IN 1
CN5501
HDMI IN 2
L5502
Q5505
R5545
R5007
TP5015
Q5504
R5546
R5544
C5509
R5006
TP5021
TP5033
TP5011
TP5013
TP5037
TP5017
TP5019
R5515
R5514
R5513
R5512
R5511
R5510
R5509
R5508
R5523
R5522
R5521
R5520
R5519
R5518
R5517
R5516
IC5500
IC5501
D5500
R5500
C5506
R5535
L5501
D5501
C5507
R5536
D5519
D5510
D5506
D5522
D5514
D5508
D5504
D5502
L5500
R5504
R5529
TP5035
C5510
D5523
D5516
D5509
D5505
D5503
D5521
D5511
D5507
R5505
R5531
TP5031
C5511
R5501
R5042
R5041
R5040
C5015
R5038
R5035
R5036
IC5514
IC5513
R5039
C5508
R5043
C5014
R5034
R5037
C5013
C5012
C3058
R3083
R3084
R3052
R3051
CN5504
IC5504
C5515
TP5028
TP5026
IC5503
TP5048
R5026
R5028
R5027
R5025
L5033
L5001
L5003
C5008
C5007
TP5000
L5002
C5005
C5006
TP5002
C5010
TP5038
TP5008
R5552
R5676
D5528
R5566
CN5503
R5565
R5564
R5561
R5562
R5563
TP5024
TP5022
R5671
D5505
C5526
C5537
R5598
C5628
R5669
R5599
C5004
R5613
R5614
R5641
TP5004
FL5505
L5521
C5606
FL5504
R5643
TP5006
L5520
C5612
C5613
C5611
TP5054
TP5058
TP5052
R5056
R5057
IC5508
C5614
C5602
R5601
C5554
R5595
C5627
R5597
C5563
C5562
R5612
R5631
C5585
C5584
C5593
C5598
C5597
C5580
C5579
C5594
C5595
C5601
C5610
JS5503
L5509
C5525
C5535
R5001
R5594
C5626
TP5050
C5559
C5555
C5547
C5577
FL5501
R5058
L5512
R5655
R5656
L5516
C5561
C5523
C5624
C5581
C5000
C5599
L5522
TP5046
C5534
R5000
R5596
L5000
R5611
C5556
C5564
C5560
C5557
C5550
C5576
L5513
R5019
R5652
TP5515
R5678
R5622
C5565
C5539
R5033
C5540
C5544
JS5501
C5543
C5538
R5054
R5053
Q5002
TP5056
C5573
C5570
FL5502
L5515
R5050
TP5044
R5609
R5046
R5615
C5569
R5632
R5628
C5566
R5630
R5629
Q5001
C5020
C5019
R5052
R5654
FL5506
R5044
Q5518
TP5061
C5016
R5048
C5018
X5500
R5065
C5620
C5618
C5615
IC5509
C5609
C5607
L5518
C5623
R5661
R7378
TP5040
IC7117
IC7101
R7222
R7220
R7224
R7229
R7226
R7227
R7228
CN7101
TP7103
TP7102
TP7101
R7114
R7116
FL7106
L7101
L7107
R8456
R8457
R8463
R8462
R8459
R8458
R8465
R8464
R8113
R8128
C8002
C8091
C8001
R8002
R8001
R8115
R8511
R8469
R8514
TP8823
R8812
R8874
R8921
TP8821
C8910
C8911
C8912
C8913
C8914
R8934
R8802
R8864
C8907
C8909
C8908
R8862
R8887
TP8824
TP8825
TP8827
R8861
TP8826
R8860
TP8812
R8823
FL8801
R8859
R8858
C8903
C8905
C8906
R8822
FL8802
TP8811
R8815
TP8815
C8899
C8901
R8801
R8895
C8891
R8896
C8889
IC8802
R8928
R8929
R8930
R8927
C8801
D8802
C8906
R8918
R8960
R8870
R8873
C8904
R8959
D8803
R8899
C8902
C8895
R8889
Q8803
C8959
C8892
C8887
R8811
R8809
C8888
R8810
R8808
C8890
CN8801
C8878
C8880
C8881
C8876
C8873
C8877
C8879
C8874
C8875
C8871
R8841
R8842
R8843
C8885
C8872
TP8816
X8801
TP5042
R8447
R8420
R8472
R8482
R8471
R8476
R8481
R8474
R8479
R8484
R8440
R8419
R8500
R8448
R8446
R8443
R8518
R8473
R8470
R8425
R8453
CN8402
R8431
R8430
R8429
R8428
R8427
R8426
R8435
R8434
R8433
R8416
R8409
R8411
R8412
CN8401

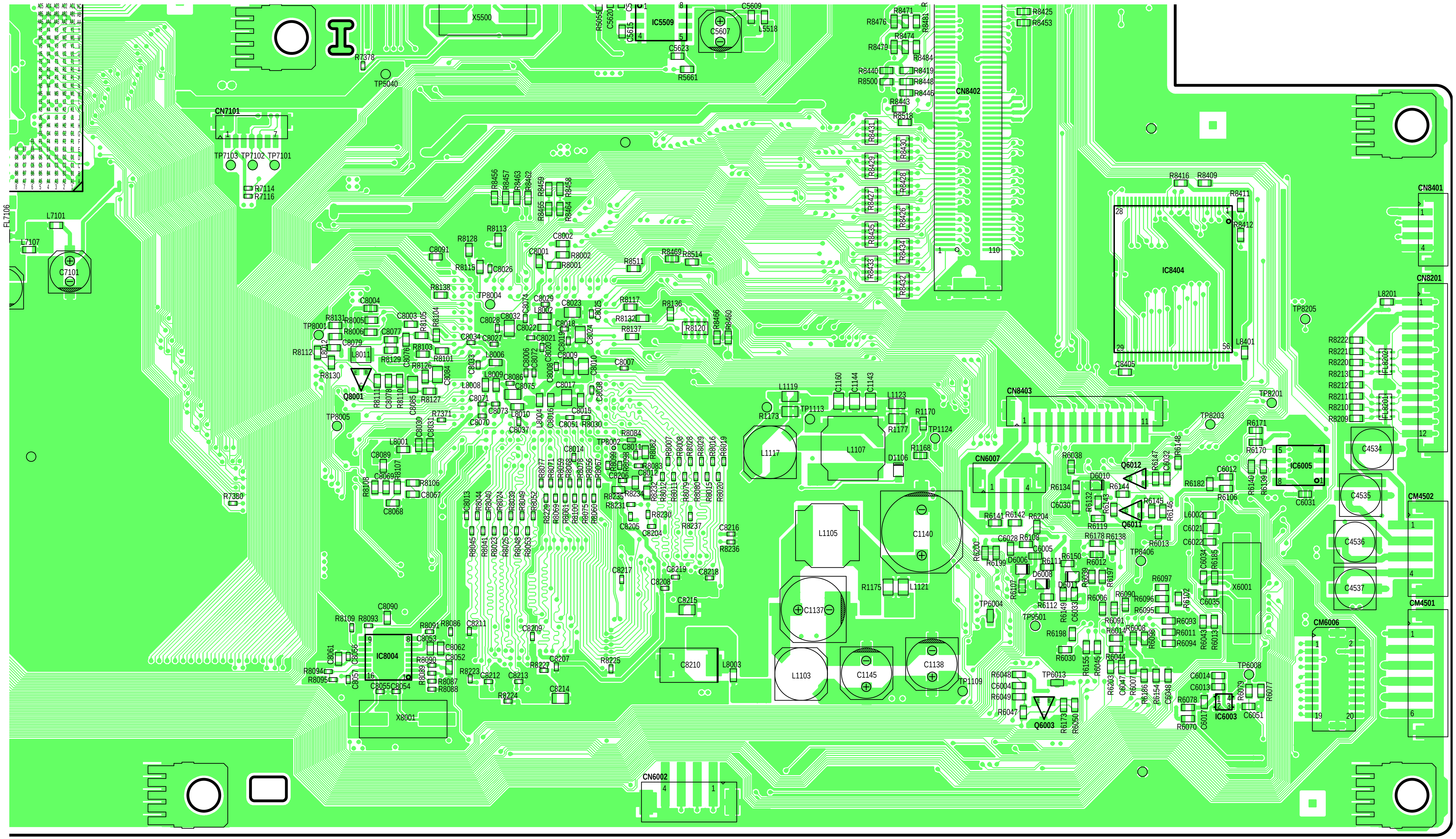
MAIN P.C.B. LSEP3234A
(COMPONENT SIDE)

1	2
3	4


CN9501
IC1102
IC1101
L4501
L4502
L4504
L4503
IC9503
IC9501
CN7001
C9516
C9515
C9513
C9500
C9514
Q9500
IC1203
L1206
C1221
C1222
L1205
L1204
C1225
C1224
D1201
IC1202
L1201
L1202
C1216
C1203
TP1201
C1218
D1202
IC1201
L1203
TP1203
IC7106
IC7109
IC7110
C7452
C7458
C7460
C7464
C7375
C7138
C7167
C7101
C7412
C7505
CN7101
TP7103 TP7102 TP7101
TP7104
TP7131
TP1207
TP1205
TP8001
TP8005
R7156 R7160 R7163 R7158 R7159 R7157
R7380
PbF

MAIN P.C.B. LSEP3234A
(COMPONENT SIDE)

1	2
3	4

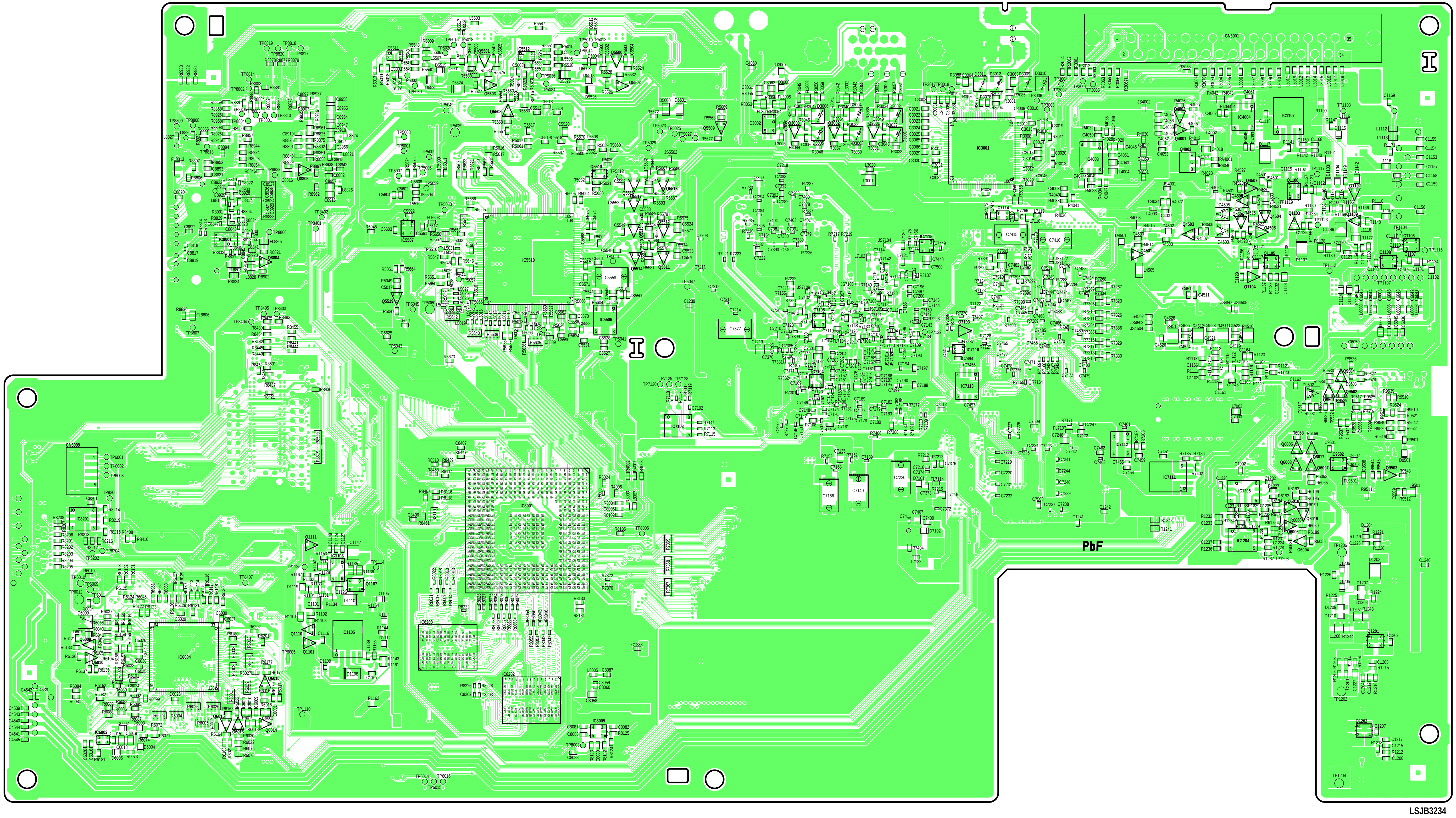

X5500
IC5509
C5607
CN7101
TP7103 TP7102 TP7101
C7101
L7101
L7107
FL7106
CN8402
IC8404
CN8401
CN8201
CN8403
IC6005
CN6007
Q6012
Q6011
Q6003
IC6003
X6001
CM4502
CM4501
CM6006
C4534
C4535
C4536
C4537
L1117
L1107
L1105
C1140
C1137
L1103
C1145
C1138
C8210
L8003
IC8004
X8001
Q8001
CN6002

LSJB3234

MAIN P.C.B. LSEP3234A
(FOIL SIDE)

1	2
3	4

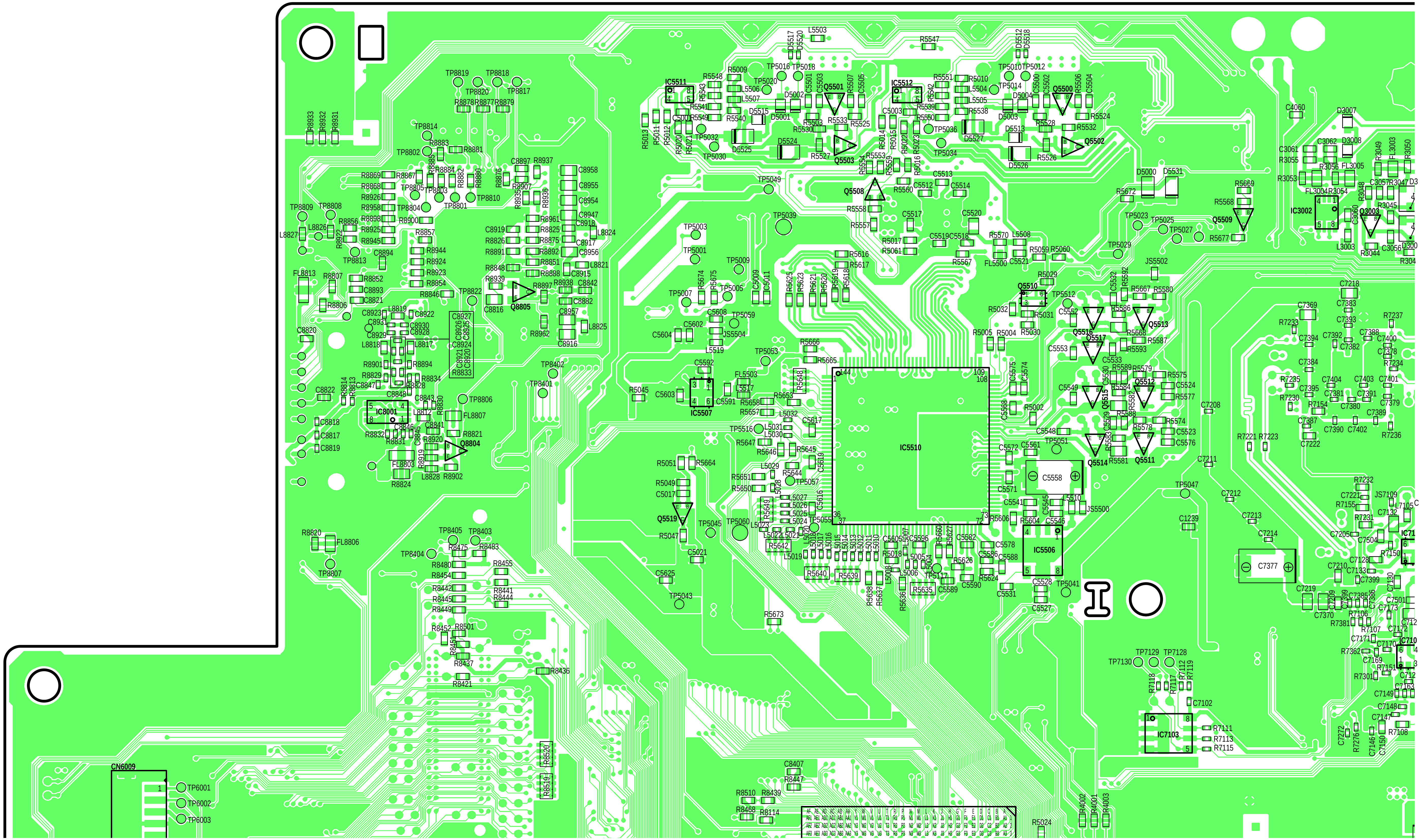
NOTE: MULTILAYER P.C.B.
THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.


CN3001
IC3001
IC5510
IC8001
IC6004
IC8201
IC1105
IC8202
IC8203
IC8005
IC1107
IC4004
IC7113
IC7112
IC7111
IC7103
IC1205
IC1204
CN6009
PbF
LSJB3234

MAIN P.C.B. LSJB3234A
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

MAIN P.C.B. LSEP3234A
(FOIL SIDE)

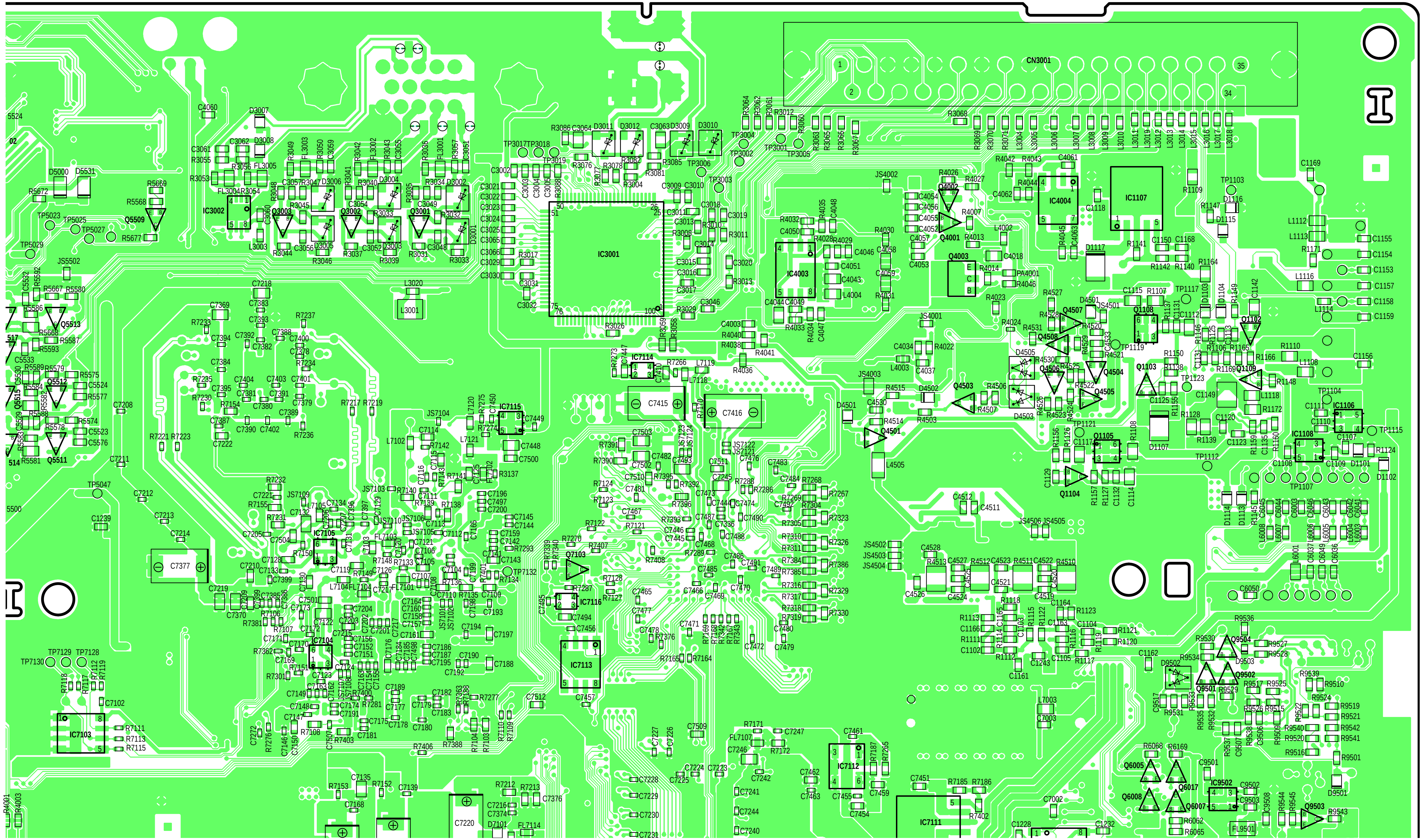
1	2
3	4


IC5510
IC5511
IC5512
IC5506
IC5507
IC8001
IC7103
IC3002
CN6009
C5558
C7377
Q5500
Q5501
Q5502
Q5503
Q5508
Q5509
Q5510
Q5511
Q5512
Q5513
Q5514
Q5515
Q5516
Q5517
Q5519
Q8804
Q8805
Q3003
TP6001
TP6002
TP6003

MAIN P.C.B. LSEP3234A

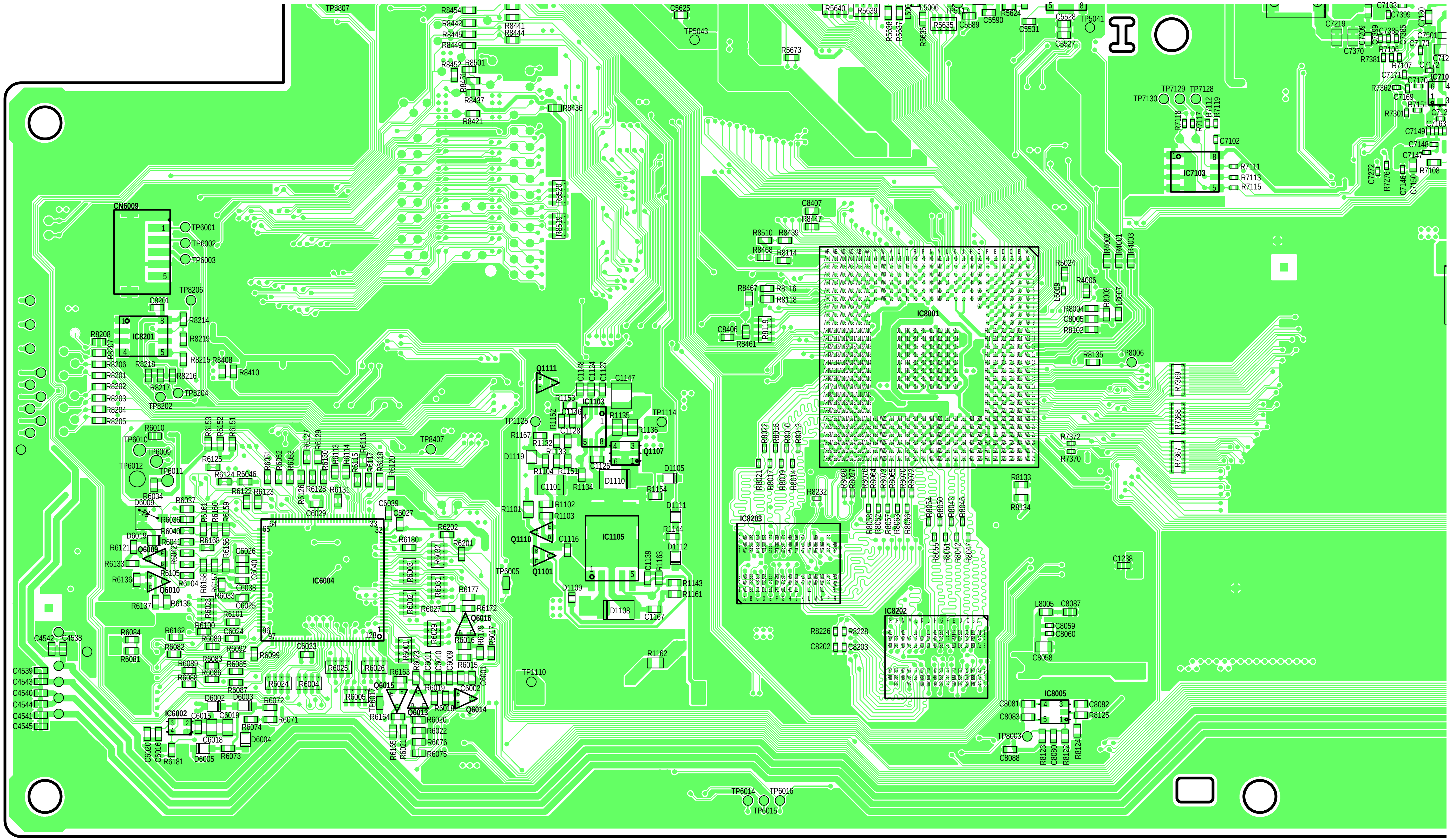
(FOIL SIDE)

1	2
3	4


CN3001
IC3001
IC3002
IC4003
IC4004
IC1107
IC1106
IC1108
IC7103
IC7104
IC7105
IC7111
IC7112
IC7113
IC7114
IC7115
IC7116
IC9502
C7377
C7415
C7416
C7220
Q1102
Q1103
Q1104
Q1105
Q1108
Q1109
Q3001
Q3002
Q3003
Q4001
Q4002
Q4003
Q4501
Q4503
Q4504
Q4505
Q4506
Q4507
Q4508
Q5509
Q5511
Q5512
Q5513
Q5515
Q6005
Q6007
Q6008
Q6017
Q7103
Q9501
Q9502
Q9503
Q9504
L1001
L3020

MAIN P.C.B. LSEP3234A
(FOIL SIDE)

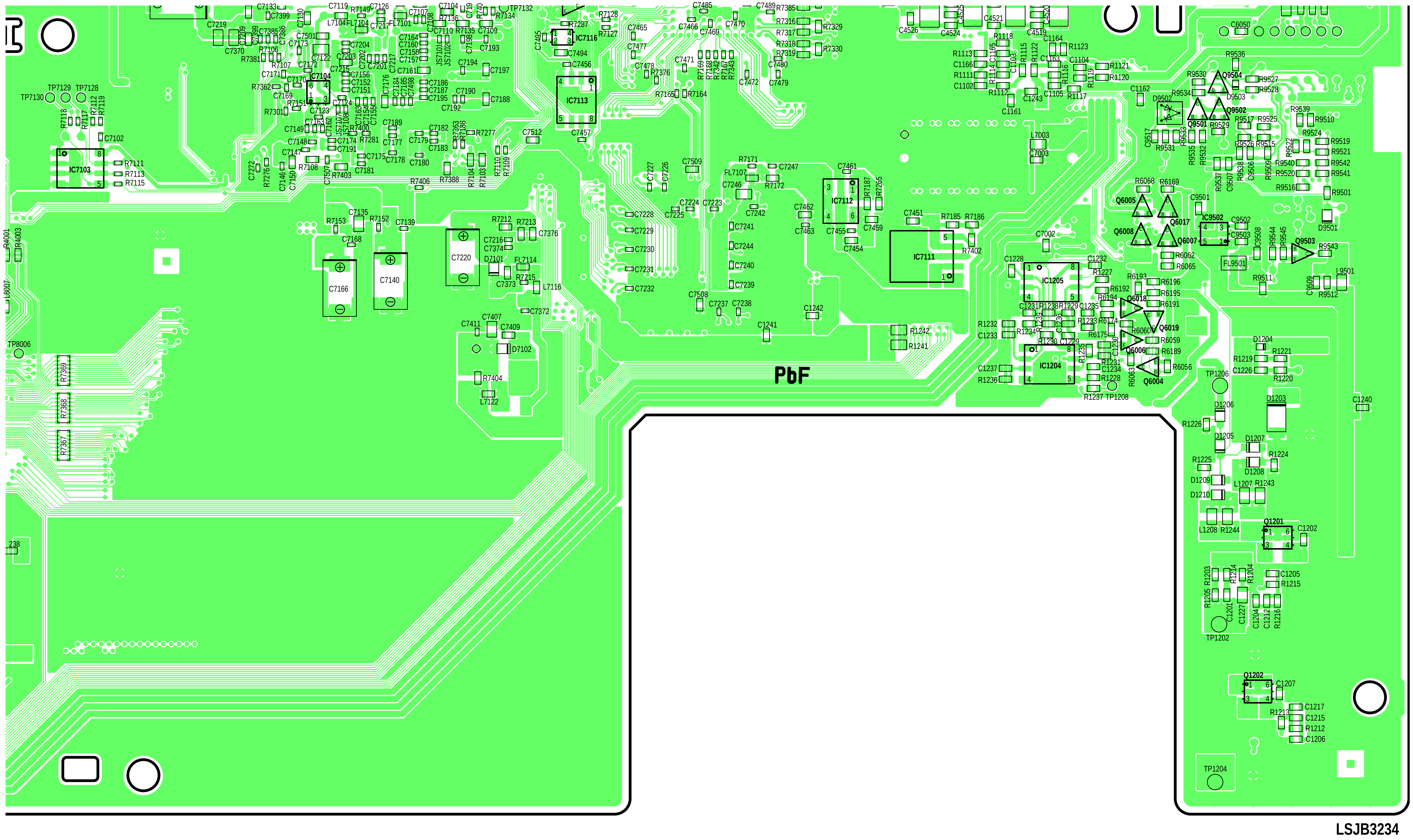
1	2
3	4


CN6009
TP6001
TP6002
TP6003
TP8206
C8201
IC8201
R8214
R8219
R8215
R8408
R8410
R8208
R8207
R8206
R8201
R8202
R8203
R8204
R8205
R8218
R8216
R8217
TP8204
TP8202
TP8807
R8454
R8442
R8445
R8449
R8441
R8444
R8452
R8501
R8451
R8437
R8421
R8436
R8520
R8519
C5625
TP5043
R5640
R5639
R5638
R5637
R5636
L5006
TP5117
R5635
C5589
C5590
R5624
C5531
C5528
C5527
TP5041
R5673
TP7130
TP7129
TP7128
R7118
R7117
R7112
R7119
C7102
IC7103
R7111
R7113
R7115
C7219
C7370
C7133
C7399
C7385
R7381
R7106
R7107
C7501
C7173
C7171
C7172
R7362
C7170
IC710
C7169
R7151
R7301
C7149
C7148
C7147
R7108
C7272
R7276
C7146
C7150
C8407
R8447
R8510
R8439
R8468
R8114
R8467
R8116
R8118
C8406
R8461
R8119
IC8001
R5024
R4006
R4002
R4001
R4003
L5009
R8004
C8005
R8102
R8003
L8007
R8135
TP8006
R7369
R7368
R7367
R7372
R7370
R8022
R8018
R8010
R8013
R8021
R8017
R8009
R8014
R8026
R8027
R8076
R8064
R8073
R8065
R8070
R8072
R8232
R8133
R8134
R8058
R8062
R8057
R8063
R8066
R8054
R8050
R8043
R8046
R8055
R8051
R8042
R8047
IC8203
IC8202
R8226
R8228
C8202
C8203
C1238
L8005
C8087
C8059
C8060
C8058
C8081
C8083
IC8005
C8082
R8125
TP8003
C8088
R8123
C8080
R8122
R8124
Q1111
C1148
C1124
C1127
C1147
R1153
IC1103
C1146
R1152
C1128
R1135
R1136
TP1114
TP1125
R1167
R1132
R1133
Q1107
D1119
C1126
R1104
R1151
D1110
D1105
C1101
R1134
R1154
R1101
R1102
R1103
D1111
Q1110
C1116
IC1105
R1144
D1112
Q1101
C1139
R1163
TP6005
D1109
R1143
R1161
D1108
C1167
R1162
TP1110
TP8407
R6010
TP6010
TP6009
TP6012
TP6011
R6153
R6152
R6151
R6125
R6124
R6046
R6122
R6123
R6051
R6052
R6053
R6127
R6129
R6130
R6113
R6114
R6115
R6116
R6117
R6118
R6120
R6126
R6128
R6131
R6034
D6009
R6037
R6036
R6040
R6041
R6042
D6019
R6121
Q6009
R6133
R6105
R6136
R6104
Q6010
R6137
R6135
R6161
R6160
R6159
R6168
R6156
C6026
C6040
R6158
R6157
C6038
R6033
R6028
C6025
C6039
C6027
C6029
IC6004
R6202
R6180
R6201
R6032
R6003
R6031
R6002
R6177
R6027
R6172
Q6016
R6101
R6100
R6162
C6024
R6080
R6084
R6082
R6092
R6061
R6099
C6023
R6029
R6016
R6179
R6017
R6089
R6083
R6085
R6088
R6086
R6025
R6026
R6011
R6023
C6011
C6010
C6009
R6015
R6024
R6004
R6163
R6019
C6001
C6002
Q6015
R6005
D6002
D6003
R6072
TP6017
R6164
Q6013
R6018
Q6014
IC6002
C6015
C6019
R6071
R6074
R6020
R6022
C6018
D6004
R6076
C6020
C6016
R6181
D6005
R6073
R6165
R6021
R6075
C4542
C4538
C4539
C4543
C4540
C4544
C4541
C4545
TP6014
TP6016
TP6015

MAIN P.C.B. LSEP3234A

(FOIL SIDE)

1	2
3	4

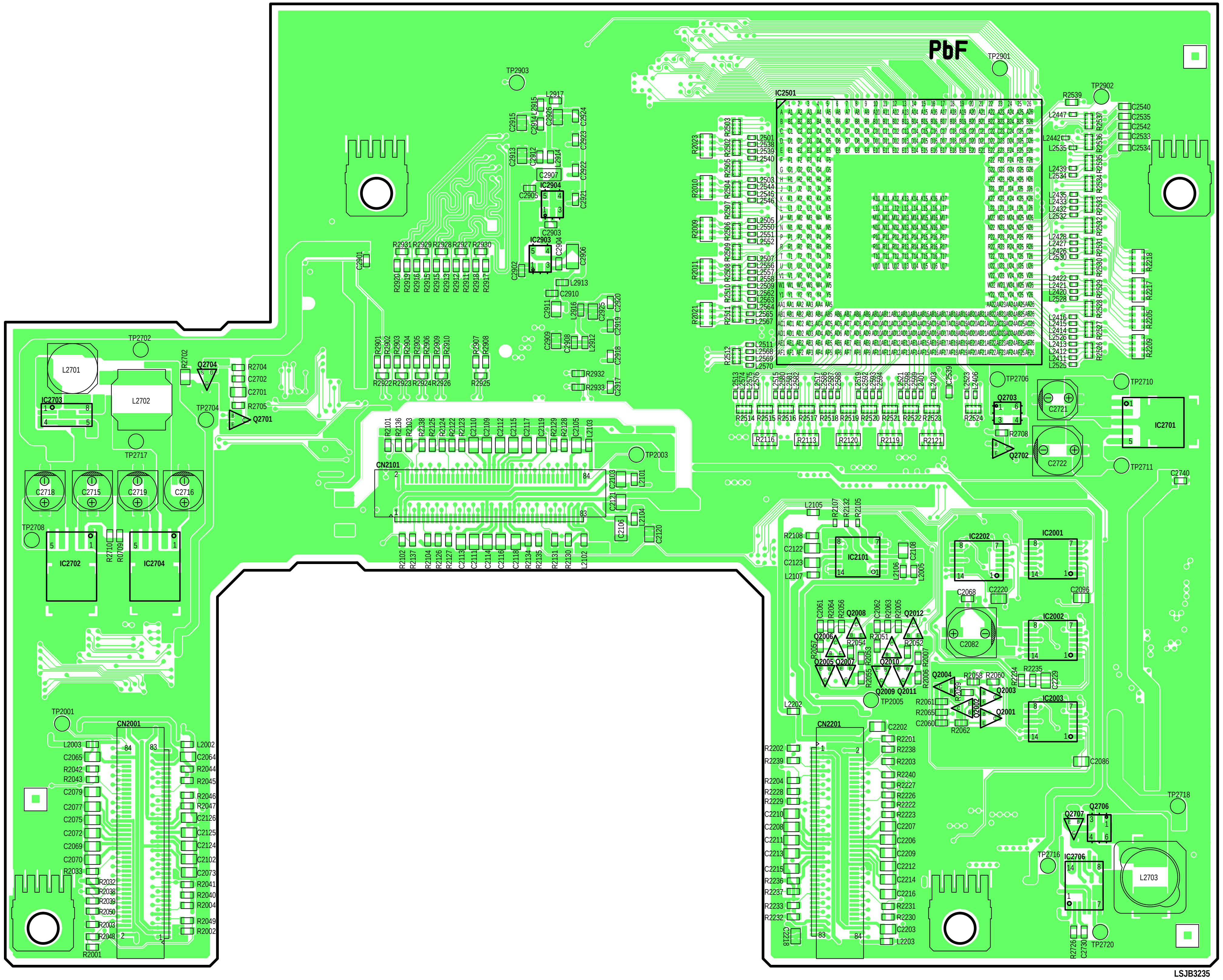

PbF
IC7103
IC7104
IC7113
IC7116
IC7112
IC7111
IC1205
IC1204
IC9502
Q9501
Q9502
Q9503
Q9504
Q6004
Q6005
Q6006
Q6008
Q6017
Q6018
Q6019
Q1201
Q1202
C7166
C7140
C7220
TP7129
TP7128
TP7130
TP7132
TP8006
TP1206
TP1208
TP1202
TP1204
LSJB3234

10.2. DRIVE P.C.B.

DRIVE P.C.B. LSEP3235A

(COMPONENT SIDE)

NOTE: MULTILAYER P.C.B.
THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

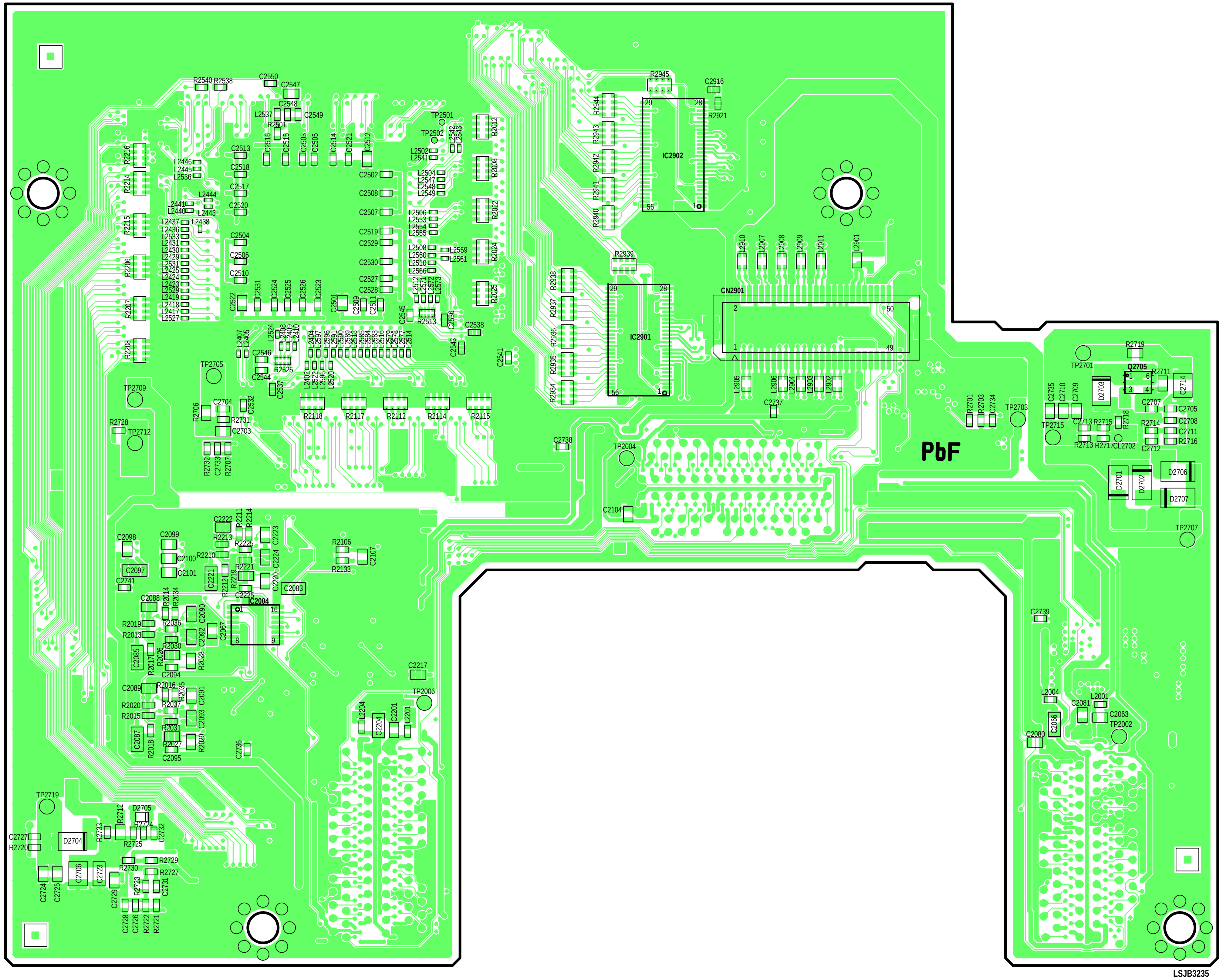

PbF
IC2501
CN2101
CN2001
CN2201
IC2701
IC2702
IC2703
IC2704
IC2706
IC2001
IC2002
IC2003
IC2101
IC2202
IC2903
IC2904
L2701
L2702
L2703
C2718
C2715
C2719
C2716
C2721
C2722
C2082
Q2701
Q2702
Q2703
Q2704
Q2706
Q2707
TP2001
TP2003
TP2005
TP2702
TP2704
TP2706
TP2708
TP2710
TP2711
TP2716
TP2717
TP2718
TP2720
TP2901
TP2902
TP2903
LSJB3235

DRIVE P.C.B. LSJB3235A
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

DRIVE P.C.B. LSEP3235A

(FOIL SIDE)

NOTE: MULTILAYER P.C.B.
THIS P.C.B. IS Multi-Layer P.C.B. THIS CIRCUIT BOARD SHOWS COMPONENT LAYOUT-PATTERN FOR COMPONENT SIDE AND FOIL SIDE. LAYOUT PATETRNS ARE SINGLE PATTERN FOR EACH SIDE THAT MAKE EASY TO SIGHT THE COMPONENT LAYOUT.

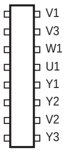
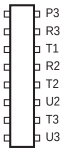
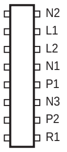
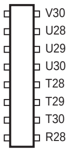

IC2902
IC2901
CN2901
IC2004
Q2705
PbF
TP2501
TP2502
TP2705
TP2709
TP2712
TP2004
TP2006
TP2719
TP2701
TP2703
TP2715
TP2707
TP2002
D2701
D2702
D2703
D2704
D2705
D2706
D2707
R2945
C2916
R2921
R2939
L2901
L2906
C2737
C2738
C2104
C2217
C2739
L2004
L2001
C2081
C2063
C2066
C2080
LSJB3235

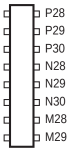
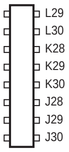
DRIVE P.C.B. LSJB3235A
PT-50LCZ70/PT-56LCZ70/PT-61LCZ70/PT-50LCZ7/PT-56LCZ7
/PT-61LCZ7/PT-50LCZ70-K/PT-56LCZ70-K/PT61LCZ70-K

11 Appendix Information of Schematic Diagram

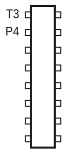
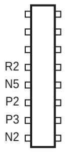
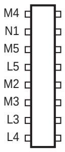
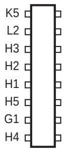
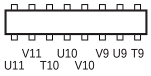
11.1. CHECKING POINT TABLE OF THE CSP IC

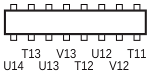
Check Point of IC7101 (Main P.C.B.)

Pin	Name	Voltage	Check Point	WF No.	Remarks
V1	GYIA3	0	R7367 (RIGHT) 	WF1	FOIL SIDE
V3	GYIA1	0			
W1	GYIA4	0			
U1	GYIA0	0			
Y1	GYIA7	0			
Y2	GYIA6	0			
V2	GYIA2	0			
Y3	GYIA5	3.3			
P3	RVIA3	0	R7368 (RIGHT) 	WF2	FOIL SIDE
R3	BUIA3	0			
T1	BUIA7	0			
R2	BUIA4	0			
T2	BUIA6	0.6			
U2	RVIA7	0			
T3	RVIA5	0			
U3	RVIA6	0			
N2	RVIA1	0	R7369 (RIGHT) 	WF3	FOIL SIDE
L1	BUIA1	0			
L2	BUIA0	0			
N1	RVIA2	0			
P1	BUIA2	0			
N3	RVIA0	0			
P2	RVIA4	0			
R1	BUIA5	0			
W3	HSIA	0	R7372 (RIGHT)	WF4	FOIL SIDE
W2	VSIA	0	R7371 (RIGHT)	WF5	COMPONENT SIDE
M2	CLKIA	1.7	R7370 (RIGHT)	WF6	FOIL SIDE
V28	ROE0	1.6	R7131 (LOWER)	WF7	COMPONENT SIDE
V29	ROE1	3.3	R7130 (RIGHT)		COMPONENT SIDE
V30	ROE2	0	R7132 (RIGHT) 		COMPONENT SIDE
U28	ROE3	0			
U29	ROE4	0			
U30	ROE5	0			
T28	ROE6	0			
T29	ROE7	0			
T30	ROE8	0			
R28	ROE9	0			

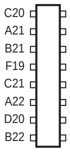
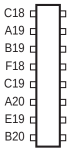
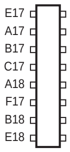
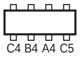
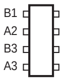
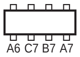
Pin	Name	Voltage	Check Point	WF No.	Remarks
R29	GOE0	3.3	R7124 (LEFT)	WF8	FOIL SIDE
R30	GOE1	0	R7123 (LEFT)		FOIL SIDE
P28	GOE2	0	R7126 (RIGHT) 		COMPONENT SIDE
P29	GOE3	0			
P30	GOE4	0			
N28	GOE5	0			
N29	GOE6	0			
N30	GOE7	0			
M28	GOE8	0			
M29	GOE9	0			
M30	BOE0	3.3	R7122 (LEFT)	WF9	FOIL SIDE
L28	BOE1	3.3	R7121 (LEFT)		FOIL SIDE
L29	BOE2	0	R7125 (RIGHT) 		COMPONENT SIDE
L30	BOE3	0			
K28	BOE4	0			
K29	BOE5	0			
K30	BOE6	0			
J28	BOE7	0			
J29	BOE8	0			
J30	BOE9	0			
H28	VSOE	0	R7127 (LEFT)	WF10	FOIL SIDE
H29	HSOE	3.2	R7128 (LEFT)	WF11	FOIL SIDE
H30	CLKOE	1.7	R7129 (RIGHT)	WF12	COMPONENT SIDE
G29	SCL	3.3	R7109 (UPPER)	——	FOIL SIDE
G30	SDA	0	R7110 (UPPER)	——	FOIL SIDE
V4	SCL_MC	3.3	R7113 (RIGHT)	WF13	FOIL SIDE
U4	SDA_MC	0	R7115 (RIGHT)	WF14	FOIL SIDE
D12	NRST	3.3	R7108 (RIGHT)	——	FOIL SIDE
Y4	OEMUTE	3.3	R7106 (UPPER)	——	FOIL SIDE
K5 L5 P4 ⋮ etc.	VDDW	3.3	R7362 (RIGHT)	—	FOIL SIDE
V12 V13 W12 ⋮ etc.	VDD25	2.5	TP7104	—	COMPONENT SIDE

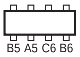
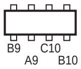
Check Point of IC7119 (Main P.C.B.)

Pin	Name	Voltage	Check Point	WF No.	Remarks
T3	ROE2	0	R7132 (LEFT) 	WF15	COMPONENT SIDE
P4	ROE3	0			
P5	ROE4	0	R7395 (LOWER)		FOIL SIDE
R2	ROE5	0	R7132 (LEFT) 		COMPONENT SIDE
N5	ROE6	0			
P2	ROE7	0			
P3	ROE8	0			
N2	ROE9	0			
M4	GOE2	0	R7126 (LEFT) 	WF16	COMPONENT SIDE
N1	GOE3	0			
M5	GOE4	0			
L5	GOE5	0			
M2	GOE6	0			
M3	GOE7	0			
L3	GOE8	0			
L4	GOE9	0			
K5	BOE2	0	R7125 (LEFT) 	WF17	COMPONENT SIDE
L2	BOE3	0			
H3	BOE4	0			
H2	BOE5	0			
H1	BOE6	0			
H5	BOE7	0			
G1	BOE8	0			
H4	BOE9	0			
G3	VSOE	3.2	R7127 (LEFT)	WF10	FOIL SIDE
G2	HSOE	1.7	R7128 (LEFT)	WF11	FOIL SIDE
J3	CLKOE	1.7	R7129 (RIGHT)	WF12	COMPONENT SIDE
T9	PEAKS_OSD0	0.4	R7366 (LOWER) 	WF37	COMPONENT SIDE
U9	PEAKS_OSD1	0.1			
V9	PEAKS_OSD2	0.9			
V10	PEAKS_OSD3	0.9			
U10	PEAKS_OSD4	0.1			
T10	PEAKS_OSD5	0.4			
V11	PEAKS_OSD6	0.4			
U11	PEAKS_OSD7	0.9			

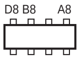
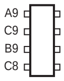
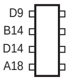
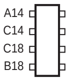
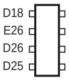
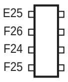
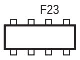
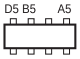
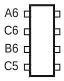
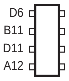
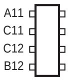
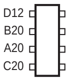
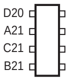
Pin	Name	Voltage	Check Point	WF No.	Remarks
T11	PEAKS_OSD8	0.1	R7365 (LOWER) 	WF37	COMPONENT SIDE
V12	PEAKS_OSD9	0.9			
U12	PEAKS_OSD10	0.4			
T12	PEAKS_OSD11	0.1			
V13	PEAKS_OSD12	0.1			
U13	PEAKS_OSD13	0.1			
T13	PEAKS_OSD14	0.5			
U14	PEAKS_OSD15	0.9			
T8	LOSDOUT_CLK_1	1.6	R7405 (LOWER)	WF38	COMPONENT SIDE
J4	CLK1	1.6	R7270 (RIGHT)	WF39	FOIL SIDE
M17	TA1+	0.5	R7308 (RIGHT)	WF18	COMPONENT SIDE
M18	TA1-	1.9	R7309 (RIGHT)	WF19	COMPONENT SIDE
N17	TB1+	2.5	R7306 (RIGHT)	WF18	COMPONENT SIDE
N18	TB1-	0.1	R7307 (RIGHT)	WF19	COMPONENT SIDE
N15	TC1+	0	R7304 (LEFT)	WF18	FOIL SIDE
N16	TC1-	0.5	R7305 (LEFT)	WF19	FOIL SIDE
R18	TD1+	2.5	R7302 (RIGHT)	WF18	COMPONENT SIDE
R17	TD1-	0.1	R7303 (RIGHT)	WF19	COMPONENT SIDE
L17	CLK1+	0.4	R7310 (LEFT)	WF20	FOIL SIDE
L18	CLK1-	0.2	R7311 (LEFT)	WF20	FOIL SIDE
D17	TA2+	2.5	R7320 (RIGHT)	WF18	COMPONENT SIDE
C17	TA2-	0.1	R7321 (RIGHT)	WF19	COMPONENT SIDE
D15	TB2+	0	R7318 (LEFT)	WF18	FOIL SIDE
D16	TB2-	2.5	R7319 (LEFT)	WF19	FOIL SIDE
E15	TC2+	0	R7316 (LEFT)	WF18	FOIL SIDE
E16	TC2-	0.5	R7317 (LEFT)	WF19	FOIL SIDE
F17	TD2+	2.5	R7314 (RIGHT)	WF18	COMPONENT SIDE
F18	TD2-	0.1	R7315 (RIGHT)	WF19	COMPONENT SIDE
H17	CLK2+	0.4	R7384 (LEFT)	WF20	FOIL SIDE
H16	CLK2-	0.2	R7385 (LEFT)	WF20	FOIL SIDE
E1 G7 P1 ⋮ etc.	VCCIO1 VCCIO2 VCCIO4	3.3	R7362 (RIGHT)	—	FOIL SIDE

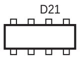
Check Point of IC8001 (Main P.C.B.)

Pin	Name	Voltage	Check Point	WF No.	Remarks
C20	VOP2	0	R7367 (LEFT) 	WF1	FOIL SIDE
A21	VOP3	0			
B21	VOP4	0			
F19	VOP5	0			
C21	VOP6	0			
A22	VOP7	0			
D20	VOP8	0			
B22	VOP9	3.3			
C18	VOP12	0	R7368 (LEFT) 	WF2	FOIL SIDE
A19	VOP13	0			
B19	VOP14	0			
F18	VOP15	0			
C19	VOP16	0.6			
A20	VOP17	0			
E19	VOP18	0			
B20	VOP19	0			
E17	VOP22	0	R7369 (LEFT) 	WF3	FOIL SIDE
A17	VOP23	0			
B17	VOP24	0			
C17	VOP25	0			
A18	VOP26	0			
F17	VOP27	0			
B18	VOP28	0			
E18	VOP29	0			
A23	MVCLK	1.7	R7370 (LEFT)	WF6	FOIL SIDE
C22	MHSYNC	0	R7372 (LEFT)	WF4	FOIL SIDE
E20	MVSYNC	0	R7371 (RIGHT)	WF5	COMPONENT SIDE
AF13	SDCLK	0	R8208 (RIGHT)	—	FOIL SIDE
AB12	SDDAT0	3.3	R8201 (RIGHT)	—	FOIL SIDE
AE13	SDDAT1	3.3	R8202 (RIGHT)	—	FOIL SIDE
AB13	SDDAT2	3.3	R8203 (RIGHT)	—	FOIL SIDE
AA13	SDDAT3	3.3	R8204 (RIGHT)	—	FOIL SIDE
C5	VI1P28	1.5	R5642 (LOWER) 	WF21	FOIL SIDE
A4	VI1P29	1.5			
B4	VI1P12	1.7			
C4	VI1P13	1.0			
A3	VI1P14	0	R5649 (LEFT) 		FOIL SIDE
B3	VI1P15	0			
A2	VI1P16	3.3			
B1	VI1P17	0			
C2	VI1P18	0	R5650 (LEFT)		FOIL SIDE
C1	VI1P19	0	R5651 (LEFT)		FOIL SIDE
A7	VI1P26	1.5	R5639 (LOWER) 		FOIL SIDE
B7	VI1P4	0			
C7	VI1P5	0			
A6	VI1P6	0			

Pin	Name	Voltage	Check Point	WF No.	Remarks
B6	VI1P7	0	R5640 (LOWER) 	WF21	FOIL SIDE
C6	VI1P27	0.3			
A5	VI1P8	0			
B5	VI1P9	0			
B10	VI1P2	0.7	R5635 (LOWER) 		FOIL SIDE
C10	VI1P3	0			
A9	VI1P22	0			
B9	VI1P23	0			
B8	VI1P24	0	R5637 (LOWER)		FOIL SIDE
C8	VI1P25	0.8	R5638 (LOWER)		FOIL SIDE
A8	VI1CKOUT	0	L5009 (LOWER)	WF22	FOIL SIDE
C9	VI1CLK	1.7	R5636 (LOWER)	WF23	FOIL SIDE
D2	VI1VSYNC	0	R5645 (LOWER)	—	FOIL SIDE
D1	VI1HSYNC	0	R5646 (LOWER)	—	FOIL SIDE
H25	CLK74	1.5	R8091 (RIGHT)	WF35	COMPONENT SIDE
K21	CK27	1.5	R8093 (RIGHT)	WF36	COMPONENT SIDE
AD24	CK27D	1.5	R8093 (RIGHT)	WF36	COMPONENT SIDE
D7 D8 D16 ⋮ etc.	VDD33	3.3	L8001 (RIGHT)	—	COMPONENT SIDE
N10 P10 R10 ⋮ etc.	VDD12	1.2	L8002 (RIGHT)	—	COMPONENT SIDE
K23 K26 M21 ⋮ etc.	VDDIO	1.8	L8003 (UPPER)	—	COMPONENT SIDE
N17 R17 T15 ⋮ etc.	VDDR VDDA	3.3	L8004 (UPPER)	—	COMPONENT SIDE
C12 E14	DACVDD1 DACVDD2	3.3	L8006 (LEFT)	—	COMPONENT SIDE
P16 H21 P3	DPAVDD MVVDD AGAVDD	3.3	L8009 (LOWER)	—	COMPONENT SIDE

Check Point of IC2501 (Drive P.C.B.)

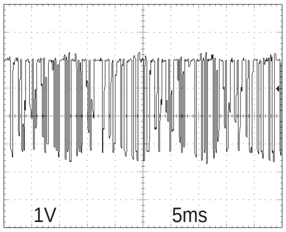
Pin	Name	Voltage	Check Point	WF No.	Remarks
A8	R1IN4	0	R2939 (UPPER) 	WF24	FOIL SIDE
B8	R1IN6	0			
D8	R1IN7	0			
C8	R1IN5	0	R2938 (LEFT) 		FOIL SIDE
A9	R1IN8	0			
C9	R1IN9	0			
B9	R1IN10	0			
D9	R1IN11	0	R2937 (LEFT) 		FOIL SIDE
B14	G1IN6	0			
D14	G1IN7	0			
A18	G1IN8	0			
A14	G1IN4	0	R2936 (LEFT) 		FOIL SIDE
C14	G1IN5	0			
C18	G1IN9	0			
B18	G1IN10	0			
D18	G1IN11	0	R2935 (LEFT) 		FOIL SIDE
D26	B1IN4	0			
D25	B1IN5	0			
E26	B1IN6	0			
E25	B1IN7	0	R2934 (LEFT) 		FOIL SIDE
F26	B1IN8	0			
F24	B1IN9	0			
F25	B1IN10	0			
F23	B1IN11	0	R2939 (UPPER) 		FOIL SIDE
A5	R2IN4	0	R2945 (UPPER) 	WF25	FOIL SIDE
B5	R2IN6	0			
D5	R2IN7	0			
C5	R2IN5	0	R2944 (LEFT) 		FOIL SIDE
A6	R2IN8	0.1			
C6	R2IN9	0.1			
B6	R2IN10	0			
D6	R2IN11	0	R2943 (LEFT) 		FOIL SIDE
B11	G2IN6	0			
D11	G2IN7	0.1			
A12	G2IN8	0.1			
A11	G2IN4	0	R2942 (LEFT) 		FOIL SIDE
C11	G2IN5	0			
C12	G2IN9	0			
B12	G2IN10	0.1			
D12	G2IN11	0	R2941 (LEFT) 		FOIL SIDE
A20	B2IN4	0			
C20	B2IN5	0			
B20	B2IN6	0			
D20	B2IN7	0	R2940 (LEFT) 		FOIL SIDE
A21	B2IN8	0.1			
C21	B2IN9	0.1			
B21	B2IN10	0			

Pin	Name	Voltage	Check Point	WF No.	Remarks
D21	B2IN11	0	R2945 (UPPER) 	WF25	FOIL SIDE
K2	R1OUT2	0.3	L2544 (RIGHT)	WF26	COMPONENT SIDE
K4	R1OUT3	0.2	L2547 (LEFT)		FOIL SIDE
L1	R1OUT4	0.2	L2545 (RIGHT)		COMPONENT SIDE
L3	R1OUT5	0.6	L2548 (LEFT)		FOIL SIDE
L2	R1OUT6	0.1	L2546 (RIGHT)		COMPONENT SIDE
L4	R1OUT7	0.8	L2549 (LEFT)		FOIL SIDE
M1	R1OUT8	0	L2505 (RIGHT)		COMPONENT SIDE
M3	R1OUT9	1.2	L2506 (LEFT)		FOIL SIDE
M2	R1OUT10	0	L2550 (RIGHT)		COMPONENT SIDE
M4	R1OUT11	0.6	L2553 (LEFT)		FOIL SIDE
G2	R2OUT2	0.3	L2501 (RIGHT)	WF26	COMPONENT SIDE
G4	R2OUT3	0	L2502 (LEFT)		FOIL SIDE
H1	R2OUT4	0	L2538 (RIGHT)		COMPONENT SIDE
H3	R2OUT5	0	L2541 (LEFT)		FOIL SIDE
H2	R2OUT6	0.1	L2539 (RIGHT)		COMPONENT SIDE
H4	R2OUT7	0	L2542 (LOWER)		FOIL SIDE
J1	R2OUT8	0	L2540 (RIGHT)		COMPONENT SIDE
J3	R2OUT9	0	L2543 (LOWER)		FOIL SIDE
J2	R2OUT10	0.1	L2503 (RIGHT)		COMPONENT SIDE
J4	R2OUT11	0.7	L2504 (LEFT)		FOIL SIDE
T2	R3OUT2	0	L2558 (RIGHT)	WF26	COMPONENT SIDE
T4	R3OUT3	0	L2561 (LEFT)		FOIL SIDE
U1	R3OUT4	0	L2509 (RIGHT)		COMPONENT SIDE
U3	R3OUT5	0	L2510 (LEFT)		FOIL SIDE
U2	R3OUT6	0	L2562 (RIGHT)		COMPONENT SIDE
U4	R3OUT7	0.8	L2565 (RIGHT)		COMPONENT SIDE
V1	R3OUT8	0	L2563 (RIGHT)		COMPONENT SIDE
V3	R3OUT9	0.5	L2566 (LEFT)		FOIL SIDE
V2	R3OUT10	0	L2564 (RIGHT)		COMPONENT SIDE
V4	R3OUT11	0.7	L2567 (RIGHT)		COMPONENT SIDE
N2	R4OUT2	0	L2551 (RIGHT)	WF26	COMPONENT SIDE
N4	R4OUT3	0	L2554 (LEFT)		FOIL SIDE
P1	R4OUT4	0	L2552 (RIGHT)		COMPONENT SIDE
P3	R4OUT5	0	L2555 (LEFT)		FOIL SIDE
P2	R4OUT6	0	L2507 (RIGHT)		COMPONENT SIDE
P4	R4OUT7	0	L2508 (LEFT)		FOIL SIDE
R1	R4OUT8	0	L2556 (RIGHT)		COMPONENT SIDE
R3	R4OUT9	0.5	L2559 (LEFT)		FOIL SIDE
R2	R4OUT10	0	L2557 (RIGHT)		COMPONENT SIDE
R4	R4OUT11	0.5	L2560 (LEFT)		FOIL SIDE
AE7	G1OUT2	1.4	L2581 (UPPER)	WF27	COMPONENT SIDE
AC7	G1OUT3	1.3	L2516 (UPPER)		FOIL SIDE
AF8	G1OUT4	0.1	L2582 (UPPER)		COMPONENT SIDE
AD8	G1OUT5	0	L2583 (UPPER)		FOIL SIDE
AE8	G1OUT6	0	L2517 (UPPER)		COMPONENT SIDE
AC8	G1OUT7	0	L2584 (UPPER)		FOIL SIDE
AF9	G1OUT8	0	L2586 (UPPER)		COMPONENT SIDE
AD9	G1OUT9	0.5	L2585 (UPPER)		FOIL SIDE

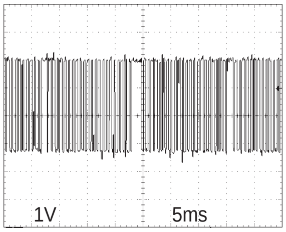
Pin	Name	Voltage	Check Point	WF No.	Remarks
AE9	G1OUT10	0	L2587 (UPPER)	WF27	COMPONENT SIDE
AC9	G1OUT11	0.6	L2518 (UPPER)		FOIL SIDE
AE3	G2OUT2	1.4	L2513 (UPPER)	WF27	COMPONENT SIDE
AE4	G2OUT3	0	L2574 (UPPER)		COMPONENT SIDE
AF5	G2OUT4	0	L2575 (UPPER)		COMPONENT SIDE
AD5	G2OUT5	0	L2514 (UPPER)		FOIL SIDE
AE5	G2OUT6	0	L2576 (UPPER)		COMPONENT SIDE
AC5	G2OUT7	0	L2577 (UPPER)		FOIL SIDE
AF6	G2OUT8	0	L2515 (UPPER)		COMPONENT SIDE
AD6	G2OUT9	0.5	L2578 (UPPER)		FOIL SIDE
AE6	G2OUT10	0	L2580 (UPPER)		COMPONENT SIDE
AC6	G2OUT11	0.5	L2579 (UPPER)		FOIL SIDE
AE13	G3OUT2	1.4	L2521 (UPPER)	WF27	COMPONENT SIDE
AC13	G3OUT3	1.3	L2596 (UPPER)		FOIL SIDE
AF14	G3OUT4	0	L2598 (UPPER)		COMPONENT SIDE
AD14	G3OUT5	0	L2597 (UPPER)		FOIL SIDE
AE14	G3OUT6	0	L2599 (UPPER)		COMPONENT SIDE
AC14	G3OUT7	0.1	L2522 (UPPER)		FOIL SIDE
AF15	G3OUT8	0	L2401 (UPPER)		COMPONENT SIDE
AD15	G3OUT9	0.6	L2402 (UPPER)		FOIL SIDE
AE15	G3OUT10	0	L2403 (UPPER)		COMPONENT SIDE
AC15	G3OUT11	0	L2404 (UPPER)		FOIL SIDE
AE10	G4OUT2	1.4	L2588 (UPPER)	WF27	COMPONENT SIDE
AC10	G4OUT3	1.3	L2589 (UPPER)		FOIL SIDE
AF11	G4OUT4	0.2	L2519 (UPPER)		COMPONENT SIDE
AD11	G4OUT5	0	L2590 (UPPER)		FOIL SIDE
AE11	G4OUT6	0	L2592 (UPPER)		COMPONENT SIDE
AC11	G4OUT7	0	L2591 (UPPER)		FOIL SIDE
AF12	G4OUT8	0	L2593 (UPPER)		COMPONENT SIDE
AD12	G4OUT9	0.5	L2520 (UPPER)		FOIL SIDE
AE12	G4OUT10	0	L2594 (UPPER)		COMPONENT SIDE
AC12	G4OUT11	0	L2595 (UPPER)		FOIL SIDE
Y26	B1OUT2	0.9	L2416 (LEFT)	WF28	COMPONENT SIDE
Y24	B1OUT3	0.5	L2419 (RIGHT)		FOIL SIDE
Y25	B1OUT4	0.1	L2528 (LEFT)		COMPONENT SIDE
Y23	B1OUT5	0.6	L2529 (RIGHT)		FOIL SIDE
W26	B1OUT6	0	L2420 (LEFT)		COMPONENT SIDE
W24	B1OUT7	0	L2423 (RIGHT)		FOIL SIDE
W25	B1OUT8	0	L2421 (LEFT)		COMPONENT SIDE
W23	B1OUT9	0.6	L2424 (RIGHT)		FOIL SIDE
V26	B1OUT10	0	L2422 (LEFT)		COMPONENT SIDE
V24	B1OUT11	0.6	L2425 (RIGHT)		FOIL SIDE
AD26	B2OUT2	0.9	L2525 (LEFT)	WF28	COMPONENT SIDE
AD25	B2OUT3	0.3	L2411 (LEFT)		COMPONENT SIDE
AC26	B2OUT4	0.1	L2412 (LEFT)		COMPONENT SIDE
AC25	B2OUT5	0	L2413 (LEFT)		COMPONENT SIDE
AB26	B2OUT6	0	L2526 (LEFT)		COMPONENT SIDE
AB24	B2OUT7	0.2	L2527 (RIGHT)		FOIL SIDE
AB25	B2OUT8	0	L2414 (LEFT)		COMPONENT SIDE
AB23	B2OUT9	1.2	L2417 (RIGHT)		FOIL SIDE
AA26	B2OUT10	0	L2415 (LEFT)		COMPONENT SIDE
AA24	B2OUT11	0.7	L2418 (RIGHT)		FOIL SIDE

Pin	Name	Voltage	Check Point	WF No.	Remarks
P26	B3OUT2	0.9	L2432 (LEFT)	WF28	COMPONENT SIDE
P24	B3OUT3	0.3	L2436 (RIGHT)		FOIL SIDE
P25	B3OUT4	0	L2433 (LEFT)		COMPONENT SIDE
P23	B3OUT5	0	L2437 (RIGHT)		FOIL SIDE
N26	B3OUT6	0	L2435 (LEFT)		COMPONENT SIDE
N24	B3OUT7	0	L2438 (LOWER)		FOIL SIDE
N25	B3OUT8	0	L2534 (LEFT)		COMPONENT SIDE
N23	B3OUT9	0	L2535 (LEFT)		COMPONENT SIDE
M26	B3OUT10	0	L2439 (LEFT)		COMPONENT SIDE
M24	B3OUT11	0.5	L2442 (LEFT)		COMPONENT SIDE
U26	B4OUT2	0.9	L2530 (LEFT)	WF28	COMPONENT SIDE
U24	B4OUT3	0.3	L2531 (RIGHT)		FOIL SIDE
U25	B4OUT4	0	L2426 (LEFT)		COMPONENT SIDE
U23	B4OUT5	0	L2429 (RIGHT)		FOIL SIDE
T26	B4OUT6	0	L2427 (LEFT)		COMPONENT SIDE
T24	B4OUT7	0	L2430 (RIGHT)		FOIL SIDE
T25	B4OUT8	0	L2428 (LEFT)		COMPONENT SIDE
T23	B4OUT9	0.6	L2431 (RIGHT)		FOIL SIDE
R26	B4OUT10	0	L2532 (LEFT)		COMPONENT SIDE
R24	B4OUT11	0.6	L2533 (RIGHT)		FOIL SIDE
W3	SHCLKR1	1.7	L2512 (UPPER)	WF29	FOIL SIDE
W4	SHCLKR2	1.7	L2572 (UPPER)	WF29	FOIL SIDE
W1	SHCLKRN1	1.6	L2571 (UPPER)	WF29	FOIL SIDE
W2	SHCLKRN2	1.6	L2573 (UPPER)	WF29	FOIL SIDE
AD16	SHCLKG1	1.6	L2524 (UPPER)	WF29	FOIL SIDE
AC16	SHCLKG2	1.6	L2409 (UPPER)	WF29	FOIL SIDE
AF16	SHCLKGN1	0	L2408 (UPPER)	WF29	FOIL SIDE
AE16	SHCLKGN2	1.6	L2410 (UPPER)	WF29	FOIL SIDE
L24	SHCLKB1	1.6	L2444 (RIGHT)	WF29	FOIL SIDE
L23	SHCLKB2	1.7	L2443 (RIGHT)	WF29	FOIL SIDE
L26	SHCLKBN1	1.7	L2441 (RIGHT)	WF29	FOIL SIDE
L25	SHCLKBN2	1.6	L2440 (RIGHT)	WF29	FOIL SIDE
A24	HSYNC	3.3	TP2901	WF30	COMPONENT SIDE
C26	VSYNC	3.3	TP2902	WF31	COMPONENT SIDE
A16	DCLK	1.8	TP2903	WF32	COMPONENT SIDE
C25	SCLK	0	R2539 (LEFT)	WF33	COMPONENT SIDE
E24	SDATA	3.0	R2538 (RIGHT)	WF34	FOIL SIDE
D17	RESET	3.4	CN2901-41	—	FOIL SIDE
E13 E14 E15 ⋮ etc.	VDD33	3.3	TP2706	—	COMPONENT SIDE
E7 E8 E9 ⋮ etc.	VDD10	1.0	TP2711	—	COMPONENT SIDE

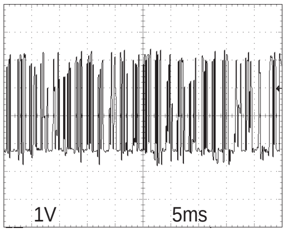
11.2. WAVEFORM TABLE



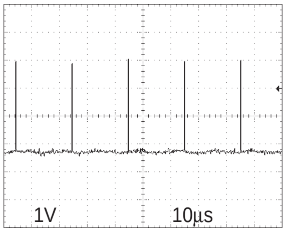
WF1



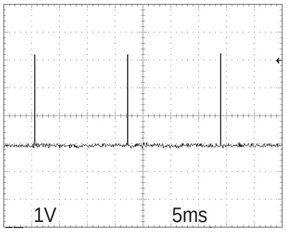
WF2



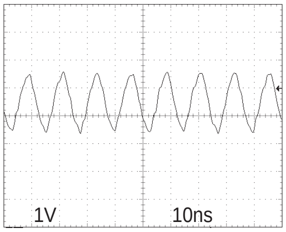
WF3



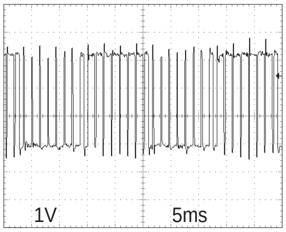
WF4



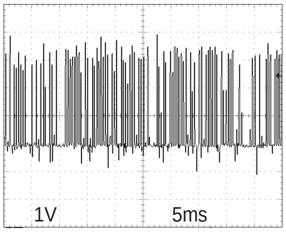
WF5



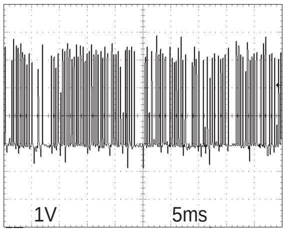
WF6



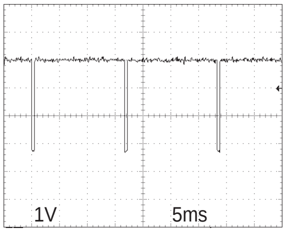
WF7



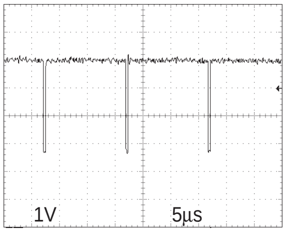
WF8



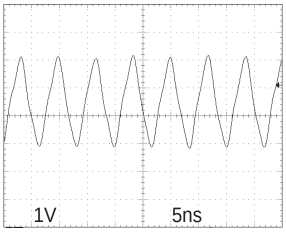
WF9



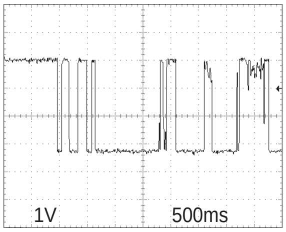
WF10



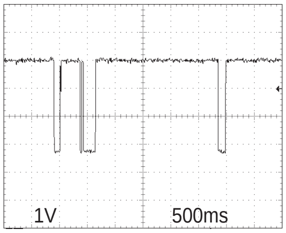
WF11



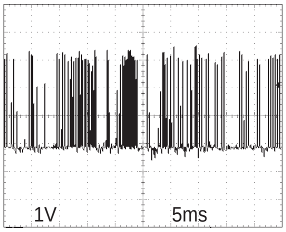
WF12



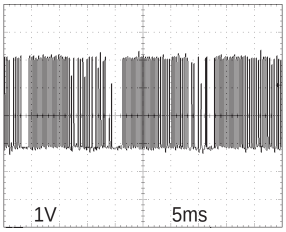
WF13



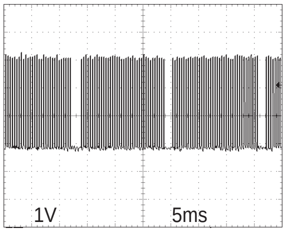
WF14



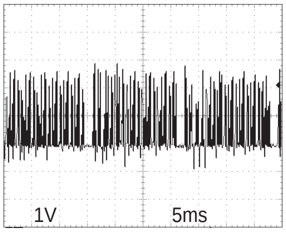
WF15



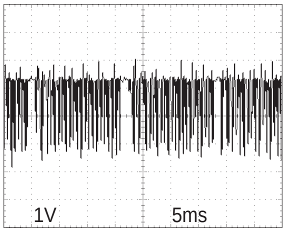
WF16



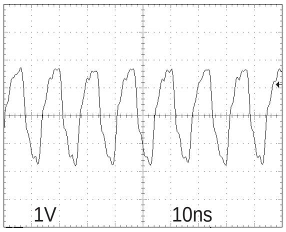
WF17



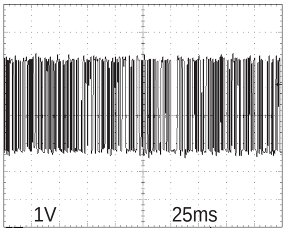
WF18



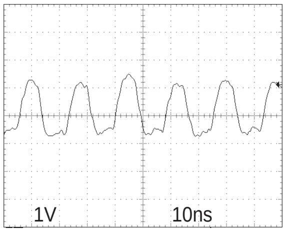
WF19



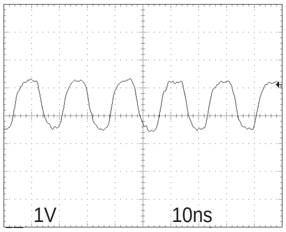
WF20



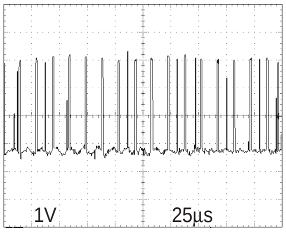
WF21



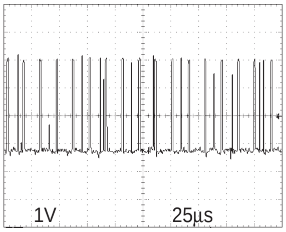
WF22



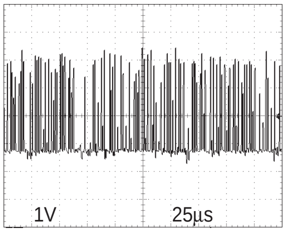
WF23



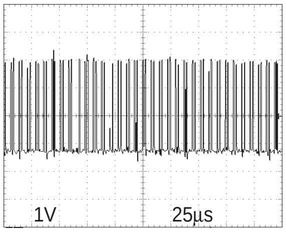
WF24



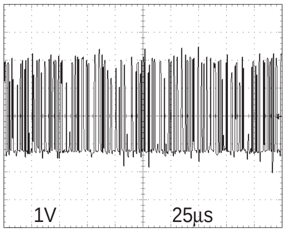
WF25



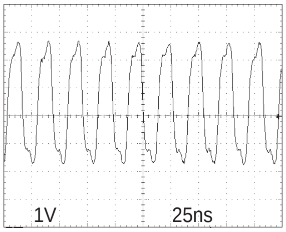
WF26



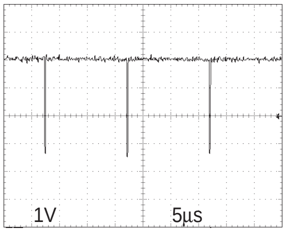
WF27



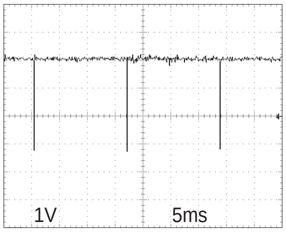
WF28



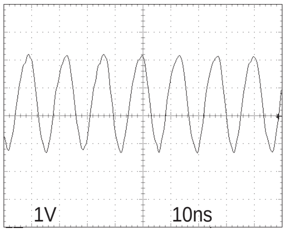
WF29



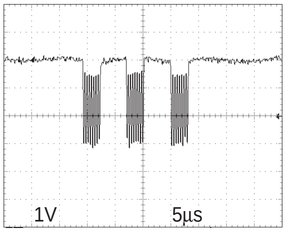
WF30



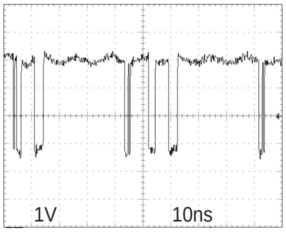
WF31



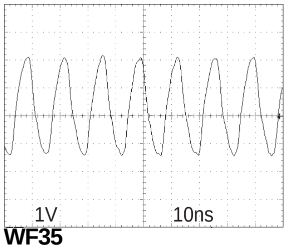
WF32



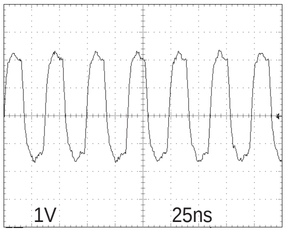
WF33



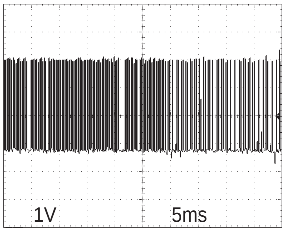
WF34



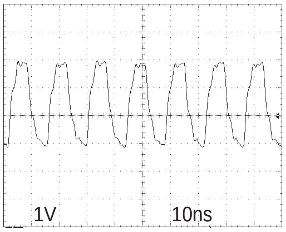
WF35



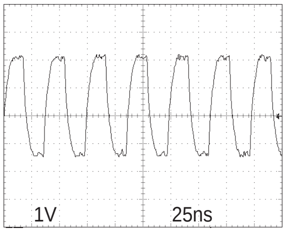
WF36



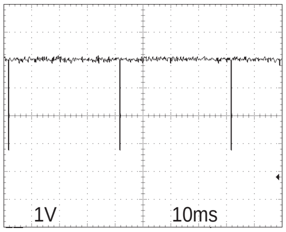
WF37



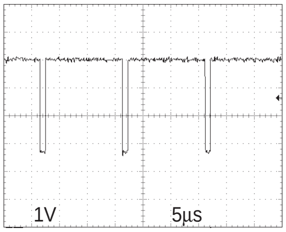
WF38



WF39



WF40

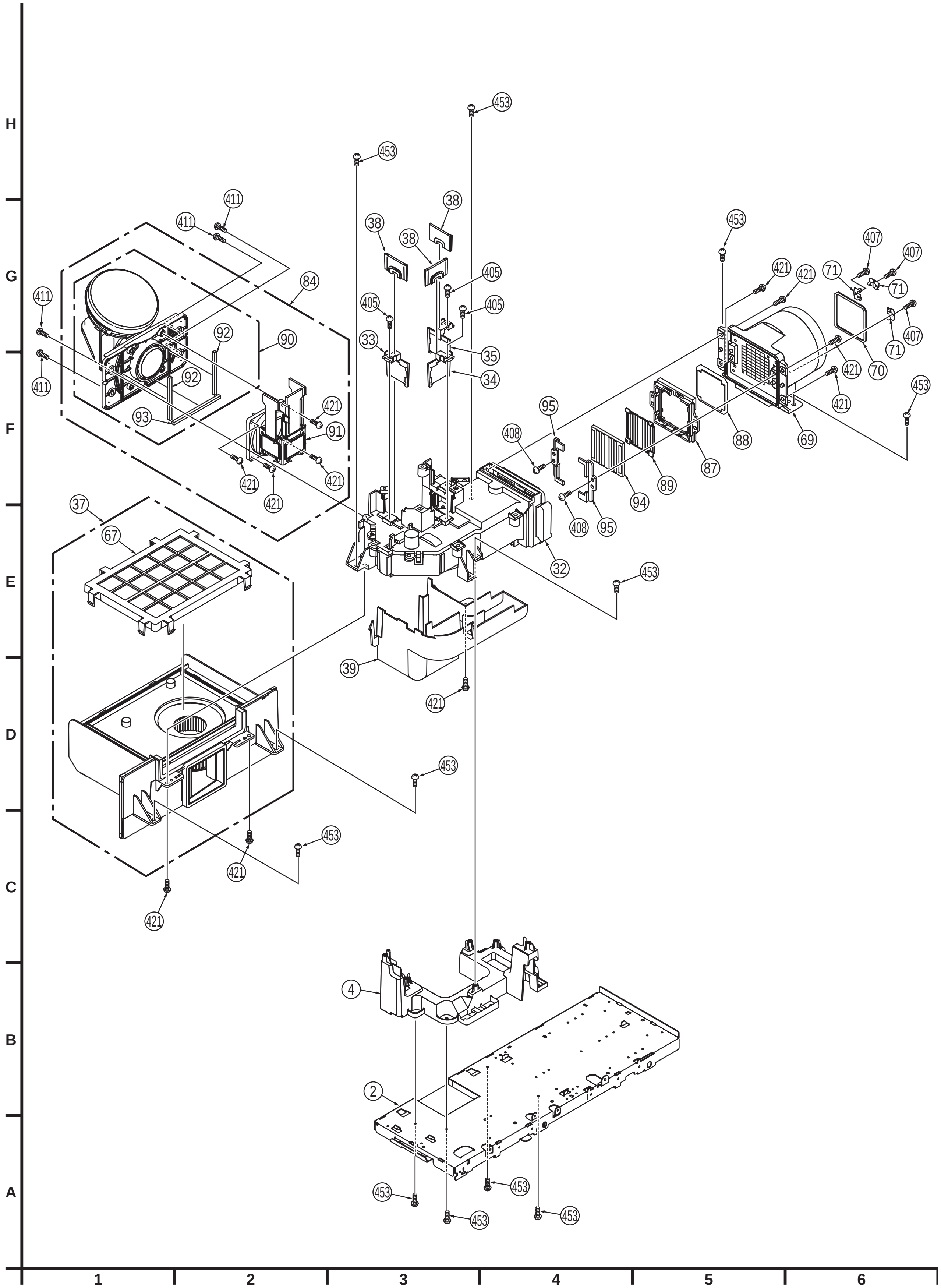


WF41

12 Exploded Views

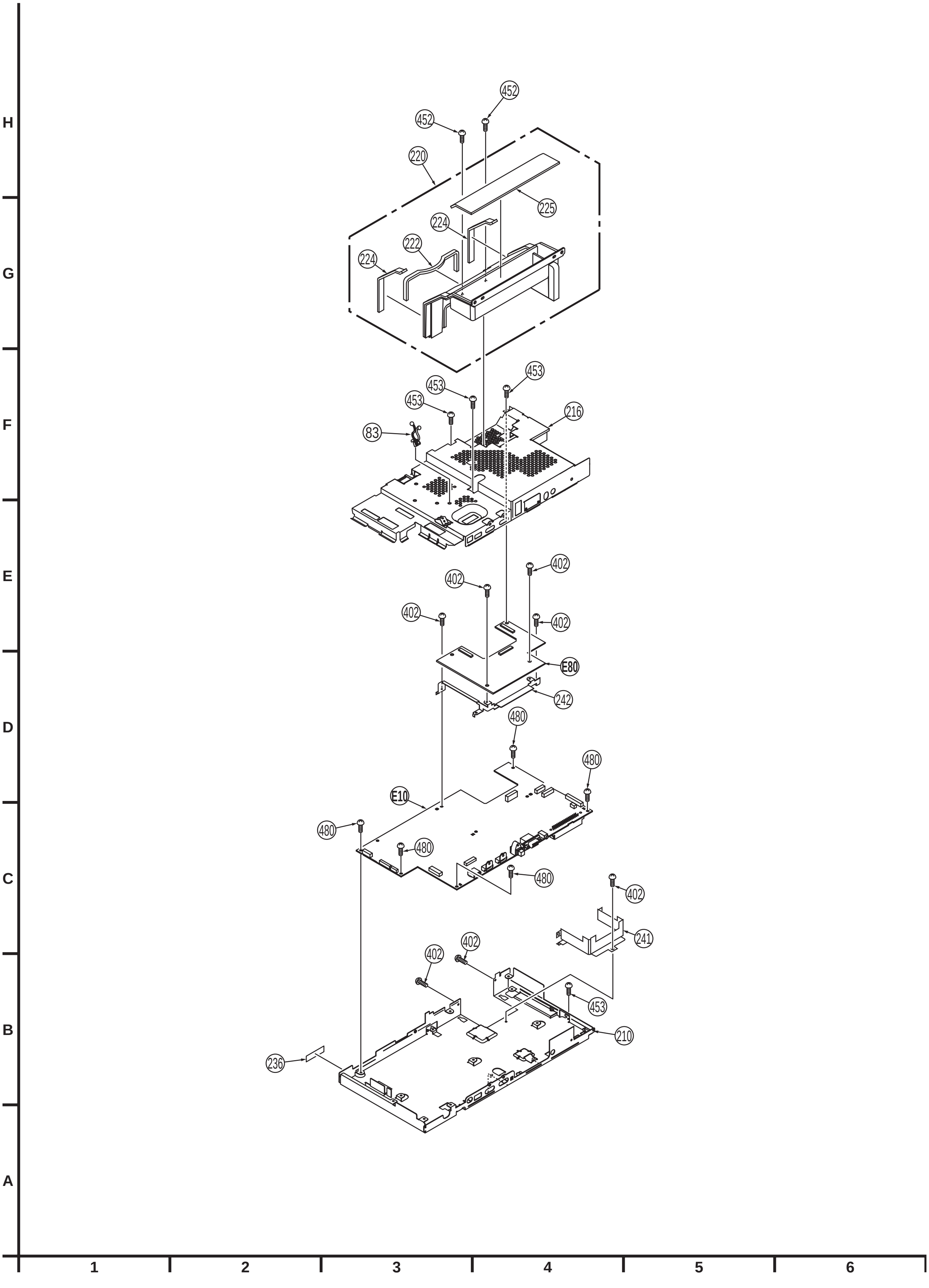
12.1. OPTICAL UNIT SECTION

❶ OPTICAL UNIT SECTION


H
G
F
E
D
C
B
A
453
453
411
411
38
38
38
84
405
405
411
92
90
33
35
34
92
411
93
421
91
421
421
421
453
421
421
407
407
71
71
407
71
70
421
453
421
88
69
95
408
89
87
94
408
95
32
37
67
453
39
421
453
453
421
421
4
2
453
453
453
453
1
2
3
4
5
6

12.2. MAIN P.C.B. UNIT AND TOP DUCT UNIT SECTION

❷ MAIN P.C.B. UNIT & TOP DUCT UNIT SECTION


H
G
F
E
D
C
B
A
1
2
3
4
5
6
452
452
220
225
224
222
224
453
453
453
216
83
402
402
402
402
E80
242
480
480
E10
480
480
480
402
241
402
402
453
210
236

13 Replacement Parts List

BEFORE REPLACING PARTS, READ THE FOLLOWING:

13.1. REPLACEMENT NOTES

13.1.1. General Notes

1. Use only original replacement parts:

   To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list.

2. **IMPORTANT SAFETY NOTICE**

   Components identified by the sign ⚠ have special characteristics important for safety. When replacing any of these components, use only the specified parts.

3. SPECIAL NOTE

   All integrated circuits and many other semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "ELECTROSTATICALLY SENSITIVE (ES) DEVICES" section of this service manual.

4. Parts with no Ref. No. in "EXPLODED VIEWS" are not supplied. And some Ref. No. will be skipped. Be sure to make your orders of replacement parts according to the parts list.
5. Parts different in shape or size may be used. However, only interchangeable parts will be supplied as service replacement parts.
6. Definition of Parts supplier:
   a. Parts with mark "PSEC" in the Remarks column are supplied from PSEC.
   b. Parts without mark in the Remarks column are supplied from PASC-NPC.
7. Item numbers with capital letter E (Example: E10, E20,...) in the Ref. No. column are shown in the exploded views.
8. Parts whose Ref. Nos. are the same are interchangeable as replacement parts. Any of these parts may be ordered and used as a replacement part.

13.1.2. Mechaniacl Replacement Notes

1. Section No. of parts shown in Exploded Views are indicated in the Remarks column.
2. Abbreviation

   RTL: Retention Time Limited

   This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.

3. After replacing the LCD/Prism Unit (Ref. No. 91), be sure to perform the following adjustment in order.
   a. Polarizer Adjustment
   b. VCOM Adjustment
   c. White Balance Adjustment

   For above adjustments, refer to "Adjustment Procedures 2."

4. After replacing the Polarizer Red Unit (Ref. No. 33), the Polarizer Green Unit (Ref. No. 34), or the Polarizer Blue Unit (Ref. No. 35), be sure to perform the "POLARIZER ADJUSTMENT" in Adjustment Procedures 2 section.

13.1.3. Electrical Replacement Notes

1. Unless otherwise specified;

   All resistors are in Ω, K = 1,000 Ω, M = 1,000 kΩ.

2. Abbreviation

RTL:	Retention Time Limited This indicates that the retention time is limited for this item. After the discontinuation of this item in production, it will no longer be available.
NR:	Non Repairable Board Ass´y
MGF CHIP:	Metal Glaze Film Chip
C CHIP:	Ceramic Chip
COMPLX CMP:	Complex Component
W FLMPRF:	Wirewound Flameproof
C.B.A.:	Circuit Board Assembly
P.C.B.:	Printed Circuit Board
E.S.D.:	Electrostatically Sensitive Devices

3. When replacing 0 Ω resistor, a wire can be substituted for it.
4. Parts with mark "CSP" in the Remarks column are CSP (Chip Size Package) IC.

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PT-50LCZ70	A
PT-56LCZ70	B
PT-61LCZ70	C
PT-50LCZ7	D
PT-56LCZ7	E
PT-61LCZ7	F
PT-50LCZ70-K	G
PT-56LCZ70-K	H
PT-61LCZ70-K	I

13.2. MECHANICAL REPLACEMENT PARTS LIST

COMPARISON CHART OF MODELS & MARKS

MODEL	MARK
PT-50LCZ70	A
PT-56LCZ70	B
PT-61LCZ70	C
PT-50LCZ7	D
PT-56LCZ7	E
PT-61LCZ7	F
PT-50LCZ70-K	G
PT-56LCZ70-K	H
PT-61LCZ70-K	I

Definition of Parts supplier:

1. **Parts with mark "PSEC" in the Remarks column are supplied from PSEC.**
2. **Parts without mark in the Remarks column are supplied from PASC-NPC.**

MECHANICAL REPLACEMENT PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
2	LSMA0990	ENGINE BASE SHIELD	1
4	LSMP0567	ENGINE SUPPORT PIECE	1
32	LSXA0859	OPTICAL SEPARATION UNIT	1 PSEC
33	LSXA0862	POLARIZER RED UNIT	1 PSEC
34	LSXA0863	POLARIZER GREEN UNIT	1 PSEC
35	LSXA0864	POLARIZER BLUE UNIT	1 PSEC
37	LSXA0866	FAN CASE UNIT	1 PSEC
38	LSXA0911	JOINT PIECE UNIT	1 PSEC
39	LSMP0555	COOLING DUCT	1 PSEC
67	LSXA0865	FAN FRAME UNIT	1 PSEC
69	LSQV0118	INTEGRATOR HOLDER UNIT	1 PSEC
70	LSDL0435	INTEGRATOR 1	1 PSEC
71	LSMA0994	INTEGRATOR 1 SPRING	1 PSEC
83	TMM5439-1	CLAMPER	2 PSEC
84	LSXA0901	OPTICAL BLOCK UNIT (A,B,D,E,G,H)	1 PSEC
84	LSXA0906	OPTICAL BLOCK UNIT (C,F,I)	1 PSEC
87	LSMP0557	PS HOLDER	1 PSEC
88	LSDL0437	INTEGRATOR 2	1 PSEC
89	LSMA0993	AL MASK	1 PSEC
90	LSXA0909	PROJECTION LENS (A,B,D,E,G,H)	1 PSEC
90	LSXA0908	PROJECTION LENS (C,F,I)	1 PSEC
91	LSXA0913	LCD/PRISM UNIT	1 PSEC
92	LSMF0554	PROJECTION LENS SPONGE 1	1 PSEC
93	LSMF0555	PROJECTION LENS SPONGE 2	1 PSEC
94	LSDL0434	P/S CONVERTER	1 PSEC
95	LSMA1013	PS SPRING	1 PSEC
210	LSSC0966	MAIN P.C.B, SHIELD CASE BOTTOM	2
216	LSSC0967	MAIN P.C.B. SHILDE CASE TOP	2
220	LSXA0912	TOP DUCT UNIT	2 PSEC
222	LSMF0558	TOP DUCT SPONGE 1	2 PSEC
224	LSMF0559	TOP DUCT SPONGE 2	2 PSEC
225	LSMF0557	TOP FILTER	2 PSEC
236	LSMF0367	SHEET,NYLON-RAYON	2
241	LSSC0989	MAIN SUPPORT SHIELD CASE	2
242	LSMA1015	DRIVE SUPPORT SHIELD	2
402	XTV3+8JFJ	TAPPING SCREW,STEEL	2
405	XTN26+6GFJ	SCREW,STEEL	1 PSEC
407	XYN2+J4FJK	SCREW,STEEL	1 PSEC
408	XYN3+J8FJK	SCREW,STEEL	1 PSEC
411	XYC3+FG10FJ	SCREW	1 PSEC
421	XTV3+8GFJ	TAPPING SCREW,STEEL	1
452	XTV3+8FFJ	TAPPING SCREW,STEEL	2
453	XTV3+10JFJ	TAPPING SCREW,STEEL	1,2
480	XYE3+EJ8FJ	SCREW W/WASHER,STEEL	2
E10	LSEP3234A	MAIN P.C.B.	2 RTL
E80	LSEP3235A	DRIVE P.C.B.	2 RTL

13.3. SERVICE FIXTURES AND TOOLS REPLACEMENT PARTS LIST

Definition of Parts supplier:

1. **All parts are supplied from PSEC.**

SERVICE FIXTURES AND TOOLS

Ref. No.	Part No.	Part Name & Description	Remarks
	LSEP3240A	Relay PCB (LCD Panel)	PSEC
	LSUA0062	LCD PANEL FLAT EXTENSION CABLE	PSEC
	LSUA0039	Fan Extension Cable	PSEC
	LSUA0063	7 Pin Extension Cable	PSEC
	LSUA0065	Thermal Fuse Defeat Cable	PSEC
	LSUA0067	4 Pin Extension Cable	PSEC
	LSEP3244A	Relay PCB (Drive side)	PSEC
	LSEP3245A	Relay PCB (Main side)	PSEC
	LSJA0582	12 Pin Extension Cable	PSEC
	K1PY31Y00003	LVDS Cable	PSEC
	LSUA0043	RS232C I/F Tool	PSEC
	LSUA0064	7 Pin Extension Cable	PSEC
	LSUA0068	8 Pin Extension Cable	PSEC
	LSUA0069	Relay PCB (Adjustment)	PSEC

13.4. ELECTRICAL REPLACEMENT PARTS LIST

Definition of Parts supplier:

1. **All parts are supplied from PASE-NPC.**

PRINTED CIRCUIT BOARD ASSEMBLY

Ref. No.	Part No.	Part Name & Description	Remarks
E10	LSEP3234A	MAIN P.C.B.	2 RTL
E80	LSEP3235A	DRIVE P.C.B.	2 RTL

13.4.1. MAIN P.C.B.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC1101	C0BBBA000022	IC, LINEAR	
IC1102	C0BBBA000022	IC, LINEAR	
IC1103	C0DBAYY00219	IC, LINEAR	
IC1104	C0DBAYY00219	IC, LINEAR	
IC1105	C0DBEYY00022	IC, LINEAR	
IC1106	C0CBCDD00004	IC, LINEAR	
IC1107	C0DBEYY00022	IC, LINEAR	
IC1108	C0CBCBC00130	IC, LINEAR	
IC1201	C0DBAYY00219	IC, LINEAR	
IC1202	C0DBAYY00219	IC, LINEAR	
IC1205	C0BBBA000022	IC, LINEAR	
IC3001	AN15876A-VT	ICS FOR VIDEO / AUDIO	
IC3002	C0JBAB000832	IC, LOGIC	E.S.D.
IC4001	C1AB00002747	IC, LINEAR	
IC4002	C0CBCBD00048	IC, LINEAR	

Ref. No.	Part No.	Part Name & Description	Remarks
IC4003	C0ABBB000230	IC, LINEAR	
IC4004	C0DBFFD00003	IC, LINEAR	
IC4501	C1AB00002730	IC, LINEAR	
IC5500	LSSK0119	IC, EEP ROM	E.S.D.
IC5501	LSSK0118	IC, EEP ROM	E.S.D.
IC5503	C1AB00002641	IC, LINEAR	
IC5504	LSSK0111	IC, EEP ROM	E.S.D.
IC5506	C0DBGGF00001	IC, LINEAR	
IC5508	C0CBCAD00015	IC, LINEAR	
IC5509	C0CBCAD00082	IC, LINEAR	
IC5510	C1AB00002753	IC, LINEAR	
IC5511	C0JBAS000258	IC, LOGIC	E.S.D.
IC5512	C0JBAS000258	IC, LOGIC	E.S.D.
IC6002	C0EBY0000341	IC, LINEAR	
IC6003	C0EBY0000341	IC, LINEAR	
IC6004	LSSK0123	IC, 32BIT MICROCONTROLLER	E.S.D.
IC6005	C3EBJC000061	IC, EEP ROM	E.S.D.
IC7101	MN84525	IC, LINEAR	CSP
IC7103	C3EBJC000061	IC, EEP ROM	E.S.D.
IC7104	C0DBGYY00284	IC, LINEAR	
IC7105	C0DBGYY00285	IC, LINEAR	
IC7106	C3ZBN0000026	IC, P2ROM	
IC7109	C0CBCAF00031	IC, LINEAR	
IC7110	C0CBCAF00031	IC, LINEAR	
IC7111	C0DBEKG00004	IC, LINEAR	
IC7112	C0CBCYE00001	IC, LINEAR	
IC7113	LSSK0124	IC, CMOS STANDARD LOGIC	E.S.D.
IC7115	C0DBGYY00284	IC, LINEAR	
IC7116	C0EBD0000368	IC, LINEAR	
IC7117	C3ABQJ000055	IC, D RAM	E.S.D. CSP
IC7119	C1ZBZ0003563	IC, CMOS STANDARD LOGIC	E.S.D. CSP
IC8001	MN2WS0039A	ICS FOR VIDEO / AUDIO	CSP
IC8004	C0ZBZ0001030	IC, LINEAR	
IC8005	C0EBM0000055	IC, LINEAR	
IC8201	LSSK0121	IC, EEP ROM	E.S.D.
IC8202	C3ABSG000039	IC, D RAM	E.S.D. CSP
IC8203	C3ABSG000039	IC, D RAM	E.S.D. CSP
IC8404	LSSK0122	IC, FLASH MEMORY	E.S.D.
IC8802	MN88435	ICS FOR VIDEO / AUDIO	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q1102	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q1102	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q1102	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q1106	B1CHPD000003	TRANSISTOR FET	
Q1107	B1CHPD000003	TRANSISTOR FET	
Q1201	B1CHPD000003	TRANSISTOR FET	
Q1202	B1CHPD000003	TRANSISTOR FET	
Q3004	B1MBACA00006	TRANSISTOR SI NPN CHIP	
Q4001	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4001	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q4001	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q4002	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4002	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q4002	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q4501	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4501	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q4501	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q4502	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or Q4502	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q4502	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q4503	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4503	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q4503	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q4504	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4504	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q4504	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q4505	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4505	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q4505	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q4506	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or Q4506	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q4506	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q4507	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q4507	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q4507	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q4508	2SB1218A0L	TRANSISTOR SI PNP CHIP	
or Q4508	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q4508	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q5500	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5500	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q5500	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q5501	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5501	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q5501	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q5502	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5502	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q5502	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q5503	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5503	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q5503	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q5504	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5504	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q5504	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q5505	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5505	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q5505	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q5508	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5508	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q5508	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q5514	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5515	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5516	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5517	2SA207700L	TRANSISTOR SI PNP CHIP	
Q5518	B1DHDC000028	TRANSISTOR SI FET CHIP	
Q5519	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q5519	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q5519	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q6003	2SA207700L	TRANSISTOR SI PNP CHIP	
Q6005	2SB1218AHL	TRANSISTOR SI PNP CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
or Q6005	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q6005	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q6008	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6008	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q6008	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q6009	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6009	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q6009	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q6010	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6010	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q6010	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q6017	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6017	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q6017	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q6018	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q6018	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q6018	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q8803	B1MBACA00006	TRANSISTOR SI NPN CHIP	
Q8804	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q8804	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q8804	B1ADCF000075	TRANSISTOR SI PNP CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D1101	MA2J111008	DIODE SI CHIP	
or D1101	B0ACCK000005	DIODE SI CHIP	
or D1101	MA2J11100L	DIODE SI CHIP	
D1102	MA2J72900L	DIODE SI CHIP	
D1103	MAZ80680ML	DIODE ZENER CHIP 6.8V	
D1104	MA2J111008	DIODE SI CHIP	
or D1104	B0ACCK000005	DIODE SI CHIP	
or D1104	MA2J11100L	DIODE SI CHIP	
D1105	MA2J111008	DIODE SI CHIP	
or D1105	B0ACCK000005	DIODE SI CHIP	
or D1105	MA2J11100L	DIODE SI CHIP	
D1106	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D1107	MA24D5400B	SCHOTTKY BARRIER DIODES	
D1108	MA24D5400B	SCHOTTKY BARRIER DIODES	
D1110	MA24D5400B	SCHOTTKY BARRIER DIODES	
D1111	MA2J111008	DIODE SI CHIP	
or D1111	B0ACCK000005	DIODE SI CHIP	
or D1111	MA2J11100L	DIODE SI CHIP	
D1112	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D1113	MA2J111008	DIODE SI CHIP	
or D1113	B0ACCK000005	DIODE SI CHIP	
or D1113	MA2J11100L	DIODE SI CHIP	
D1114	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D1117	MA24D5400B	SCHOTTKY BARRIER DIODES	
D1201	MA24D5400B	SCHOTTKY BARRIER DIODES	
D1202	MA24D5400B	SCHOTTKY BARRIER DIODES	
D1207	MA2J111008	DIODE SI CHIP	
or D1207	B0ACCK000005	DIODE SI CHIP	
or D1207	MA2J11100L	DIODE SI CHIP	
D1208	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D1209	MA2J111008	DIODE SI CHIP	
or D1209	B0ACCK000005	DIODE SI CHIP	
or D1209	MA2J11100L	DIODE SI CHIP	
D1210	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D3007	MAZ80620ML	DIODE ZENER CHIP 6.2V	
D3008	MAZ80620ML	DIODE ZENER CHIP 6.2V	
D4001	B3RAE0000030	IC, LINEAR	
D4501	MAZ81300ML	DIODE ZENER CHIP 13V	
D4503	MA3X152D0L	DIODE SI CHIP	
D4504	MAZ80330HL	DIODE ZENER CHIP 6.3V	
D4505	MA3X152E0L	DIODE SI CHIP	
or D4505	B0ADCJ000007	DIODE SI CHIP	
D5500	EZAEG2A50AX	OTHER FILTERS	
D5501	EZAEG2A50AX	OTHER FILTERS	
D5502	EZAEG2A50AX	OTHER FILTERS	
D5503	EZAEG2A50AX	OTHER FILTERS	
D5504	EZAEG2A50AX	OTHER FILTERS	
D5505	EZAEG2A50AX	OTHER FILTERS	
D5506	EZAEG2A50AX	OTHER FILTERS	
D5507	EZAEG2A50AX	OTHER FILTERS	
D5508	EZAEG2A50AX	OTHER FILTERS	
D5509	EZAEG2A50AX	OTHER FILTERS	
D5510	EZAEG2A50AX	OTHER FILTERS	
D5511	EZAEG2A50AX	OTHER FILTERS	
D5512	EZAEG2A50AX	OTHER FILTERS	
D5513	MAZ80560ML	DIODE ZENER CHIP 5.6V	
D5514	EZAEG2A50AX	OTHER FILTERS	
D5515	MAZ80560ML	DIODE ZENER CHIP 5.6V	
D5516	EZAEG2A50AX	OTHER FILTERS	
D5517	EZAEG2A50AX	OTHER FILTERS	
D5518	EZAEG2A50AX	OTHER FILTERS	
D5519	EZAEG2A50AX	OTHER FILTERS	
D5520	EZAEG2A50AX	OTHER FILTERS	
D5521	EZAEG2A50AX	OTHER FILTERS	
D5522	EZAEG2A50AX	OTHER FILTERS	
D5523	EZAEG2A50AX	OTHER FILTERS	
D5524	MA22F2000L	SMALL CAPACITY SILICON RECTIFIER DIODES	
D5525	MA22F2000L	SMALL CAPACITY SILICON RECTIFIER DIODES	
D5526	MA22F2000L	SMALL CAPACITY SILICON RECTIFIER DIODES	
D5527	MA22F2000L	SMALL CAPACITY SILICON RECTIFIER DIODES	
D5528	EZAEG2A50AX	OTHER FILTERS	
D6002	MA2J111008	DIODE SI CHIP	
or D6002	B0ACCK000005	DIODE SI CHIP	
or D6002	MA2J11100L	DIODE SI CHIP	
D6003	MA2J111008	DIODE SI CHIP	
or D6003	B0ACCK000005	DIODE SI CHIP	
or D6003	MA2J11100L	DIODE SI CHIP	
D6004	MA2J111008	DIODE SI CHIP	
or D6004	B0ACCK000005	DIODE SI CHIP	
or D6004	MA2J11100L	DIODE SI CHIP	
D6005	B0JCCE000008	DIODE SI CHIP	
D6019	B0JCCE000008	DIODE SI CHIP	
D8801	LNJ208R8ARA	LIGHT EMITTING DIODE	
D8802	LNJ208R8ARA	LIGHT EMITTING DIODE	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R1105	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1107	ERJ6GEY0R00V	MGF CHIP 1/10W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R1108	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1111	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1112	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1113	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1114	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R1115	ERJ3GEYJ153V	MGF CHIP 1/16W 15K	
R1116	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R1117	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1118	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1119	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1120	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1121	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1122	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1123	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1125	ERJ3GEYJ124V	MGF CHIP 1/16W 120K	
R1128	D1BDR082A042	MGF CHIP 1/10W 82	
R1129	ERA3YED103V	MGF CHIP 1/16W 10K	
R1130	ERA3YED332V	MGF CHIP 1/16W 3.3K	
R1131	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R1132	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R1133	ERA3YED182V	MGF CHIP 1/16W 1.8K	
R1134	ERA3YED332V	MGF CHIP 1/16W 3.3K	
R1135	D1BDR082A042	MGF CHIP 1/10W 82	
R1136	D1BDR082A042	MGF CHIP 1/10W 82	
R1139	D1BDR082A042	MGF CHIP 1/10W 82	
R1140	ERA3YED751V	MGF CHIP 1/16W 750	
R1141	ERA3YED751V	MGF CHIP 1/16W 750	
R1142	ERA3YED332V	MGF CHIP 1/16W 3.3K	
R1143	ERA3YED102V	MGF CHIP 1/16W 1K	
R1144	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R1145	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R1148	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1149	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1152	ERJ3GEYJ303V	MGF CHIP1/16W 30K	
R1153	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R1154	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R1159	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R1160	ERJ3GEYJ303V	MGF CHIP1/16W 30K	
R1161	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R1163	ERA3YED751V	MGF CHIP 1/16W 750	
R1165	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1166	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R1169	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R1171	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R1202	D1BDR082A042	MGF CHIP 1/10W 82	
R1203	ERA3YED103V	MGF CHIP 1/16W 10K	
R1204	ERA3YED332V	MGF CHIP 1/16W 3.3K	
R1205	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R1206	ERJ3GEYJ271V	MGF CHIP 1/16W 270	
R1207	ERA3YED182V	MGF CHIP 1/16W 1.8K	
R1208	D1BDR082A042	MGF CHIP 1/10W 82	
R1209	D1BDR082A042	MGF CHIP 1/10W 82	
R1210	D1BDR082A042	MGF CHIP 1/10W 82	
R1212	ERJ3GEYJ303V	MGF CHIP1/16W 30K	
R1213	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R1215	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R1216	ERJ3GEYJ303V	MGF CHIP1/16W 30K	
R1217	ERA3YED332V	MGF CHIP 1/16W 3.3K	
R1224	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R1225	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R1227	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R1229	ERJ3GEYJ153V	MGF CHIP 1/16W 15K	
R1233	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1234	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R1238	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1239	ERJ3GEYJ822V	MGF CHIP 1/16W 8.2K	
R1241	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1242	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1243	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R1244	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R3003	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3004	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3005	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R3006	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R3007	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3008	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3009	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R3010	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3011	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3012	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R3013	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3014	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3015	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3016	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3017	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3018	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3019	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3020	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3021	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3022	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3023	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3024	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3025	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R3026	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R3027	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R3028	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R3029	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3035	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3036	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3041	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3042	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3043	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3048	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3049	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3050	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3051	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3052	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3053	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3054	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3055	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R3056	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R3057	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3058	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R3059	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R3060	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3061	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3062	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3063	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3064	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3065	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3066	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3067	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3068	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3069	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3070	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R3071	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R3072	ERJ3EKF1000V	MGF CHIP 1/16W 100	
R3073	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3074	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3075	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R3076	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3077	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3078	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R3082	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R3085	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3086	ERJ3GEYJ184V	MGF CHIP 1/16W 180K	
R3087	ERJ3GEYJ124V	MGF CHIP 1/16W 120K	
R4001	ERJ3GEYJ331V	MGF CHIP 1/16W 330	
R4002	ERJ3GEYJ331V	MGF CHIP 1/16W 330	
R4003	ERJ3GEYJ331V	MGF CHIP 1/16W 330	
R4006	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4007	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4008	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R4009	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R4010	ERJ3EKF2002V	MGF CHIP 1/16W 20K	
R4011	ERJ3EKF2002V	MGF CHIP 1/16W 20K	

Ref. No.	Part No.	Part Name & Description	Remarks
R4012	ERJ3EKF2002V	MGF CHIP 1/16W 20K	
R4013	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4018	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R4019	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R4022	ERJ3EKF2001V	MGF CHIP 1/16W 2K	
R4023	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4024	D0GA222JA015	MGF CHIP 1/16W 2.2K	
R4026	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4027	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4028	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4029	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4030	ERJ3EKF1602V	MGF CHIP 1/16W 16K	
R4031	ERJ3EKF1602V	MGF CHIP 1/16W 16K	
R4032	ERJ3EKF2202V	MGF CHIP 1/16W 22K	
R4033	ERJ3EKF2202V	MGF CHIP 1/16W 22K	
R4034	ERJ3EKF3602V	MGF CHIP 1/16W 36K	
R4035	ERJ3EKF3602V	MGF CHIP 1/16W 36K	
R4038	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4039	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R4042	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R4046	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4047	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4501	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4502	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4503	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4504	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4505	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4506	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R4507	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R4508	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4509	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R4510	ERJ14YJ3R3U	MGF CHIP 1/8W 3.3	
R4511	ERJ14YJ3R3U	MGF CHIP 1/8W 3.3	
R4512	ERJ14YJ3R3U	MGF CHIP 1/8W 3.3	
R4513	ERJ14YJ3R3U	MGF CHIP 1/8W 3.3	
R4514	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R4516	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R4517	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R4518	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R4519	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4520	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R4521	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4522	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R4524	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R4525	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R4526	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R4527	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4528	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4529	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R4530	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R4531	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R5004	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5005	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5009	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5010	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5011	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5012	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5013	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5014	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5015	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5016	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5017	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5018	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5020	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5022	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5024	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R5025	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5026	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5027	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5028	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5029	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5030	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5033	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	

Ref. No.	Part No.	Part Name & Description	Remarks
R5045	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5046	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5047	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R5048	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5049	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5051	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5058	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5060	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5500	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5501	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5502	ERJ3GEYJ390V	MGF CHIP 1/16W 39	
R5503	ERJ3GEYJ390V	MGF CHIP 1/16W 39	
R5506	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5507	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5508	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5509	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5510	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5511	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5512	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5513	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5514	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5515	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5516	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5517	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5518	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5519	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5520	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5521	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5522	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5523	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5524	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5525	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5526	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5527	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R5528	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5529	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5530	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5531	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5532	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5533	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5535	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5536	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5538	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5539	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5540	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5541	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5542	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5543	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5544	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5545	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5546	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5547	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5548	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5549	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5550	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5551	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5552	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5553	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5554	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5557	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5558	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R5559	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5560	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5561	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R5562	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5563	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5564	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5565	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5566	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R5567	ERJ3EKF4701V	MGF CHIP 1/16W 4.7K	
R5570	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5578	ERJ3GEYJ151V	MGF CHIP 1/16W 150	
R5579	ERJ3GEYJ151V	MGF CHIP 1/16W 150	

Ref. No.	Part No.	Part Name & Description	Remarks
R5587	ERJ3EKF8200V	MGF CHIP 1/16W 820	
R5593	ERJ3EKF1001V	MGF CHIP 1/16W 1K	
R5596	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5597	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5599	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5602	ERJ6GEYJ102V	MGF CHIP 1/10W 1K	
R5604	ERJ3EKF7501V	MGF CHIP 1/16W 7.5K	
R5606	ERJ3EKF4701V	MGF CHIP 1/16W 4.7K	
R5609	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5611	ERJ3EKF1371V	MGF CHIP 1/16W 1.37K	
R5612	ERJ3EKF1501V	MGF CHIP 1/16W 1.5K	
R5613	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5614	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5615	ERJ3EKF1600V	MGF CHIP 1/16W 160	
R5616	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5617	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5618	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5619	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5620	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5621	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5622	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5623	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5624	ERJ3EKF1691V	MGF CHIP 1/16W 1.69K	
R5625	ERJ3GEYJ3R9V	MGF CHIP 1/16W 3.9	
R5626	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R5627	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5628	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5629	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5631	ERJ3EKF4990V	MGF CHIP 1/16W 499	
R5635	EXB38V121JV	ARRAY CHIP 120	
R5636	ERJ3GEYJ680V	MGF CHIP 1/16W 68	
R5637	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5638	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5639	EXB38V121JV	ARRAY CHIP 120	
R5640	EXB38V121JV	ARRAY CHIP 120	
R5641	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5642	EXB38V121JV	ARRAY CHIP 120	
R5643	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5644	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R5645	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5646	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5647	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5648	EXB38V330JV	ARRAY CHIP 33	
R5649	EXB38V121JV	ARRAY CHIP 120	
R5650	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5651	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R5653	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R5654	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5656	ERJ3GEYJ222V	MGF CHIP 1/16W 2.2K	
R5657	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R5658	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R5661	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5667	ERJ3GEYJ151V	MGF CHIP 1/16W 150	
R5672	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5673	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R5674	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5675	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R5676	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6006	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6007	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6008	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6011	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6012	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6013	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6014	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6027	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6030	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6033	ERJ3GEYJ105V	MGF CHIP 1/16W 1M	
R6034	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6036	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6037	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6038	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6039	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6043	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6044	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6045	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6046	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6048	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6049	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6050	ERJ3GEYJ563V	MGF CHIP 1/16W 56K	
R6057	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6058	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6064	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6067	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6068	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6070	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6071	ERJ3GEYJ474V	MGF CHIP 1/16W 470K	
R6072	ERJ3GEYJ474V	MGF CHIP 1/16W 470K	
R6073	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6074	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R6075	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6077	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6079	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R6080	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6081	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6082	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6083	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R6084	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6085	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6086	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6087	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6088	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6089	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6090	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6091	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6092	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6099	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6100	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6101	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6102	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6106	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6111	ERJ3GEYJ563V	MGF CHIP 1/16W 56K	
R6112	ERJ3GEYJ273V	MGF CHIP 1/16W 27K	
R6113	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6114	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6118	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6120	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6121	ERJ3GEYJ273V	MGF CHIP 1/16W 27K	
R6122	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6123	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6129	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6132	ERJ3GEYJ563V	MGF CHIP 1/16W 56K	
R6133	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6134	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R6137	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6138	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6139	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6140	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R6149	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R6150	ERJ3GEYJ563V	MGF CHIP 1/16W 56K	
R6151	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6152	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6153	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6154	ERJ3EKF7151V	MGF CHIP 1/16W 7.15K	
R6155	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6157	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6158	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6159	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6162	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6169	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6170	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R6171	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R6172	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R6173	ERJ3GEYJ823V	MGF CHIP 1/16W 82K	
R6176	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6177	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6178	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R6180	ERJ3GEYJ182V	MGF CHIP 1/16W 1.8K	
R6181	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R6182	ERJ3GEYJ104V	MGF CHIP 1/16W 100K	
R6185	ERJ3GEYJ821V	MGF CHIP 1/16W 820	
R6190	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6192	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6193	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6194	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R6195	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R6197	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6198	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6199	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6200	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6201	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6202	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R6204	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R7101	EXB38V330JV	ARRAY CHIP 33	
R7103	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R7104	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R7106	ERJ2GEJ332X	MGF CHIP 1/16W 3.3K	
R7107	ERJ2GEJ332X	MGF CHIP 1/16W 3.3K	
R7108	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R7109	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7110	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7111	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7113	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7114	ERJ2GEJ472X	MGF CHIP 1/16W 4.7K	
R7115	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7116	ERJ2GEJ472X	MGF CHIP 1/16W 4.7K	
R7117	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7118	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7119	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R7120	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7121	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7122	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7123	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7124	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7125	EXB2HV470JV	ARRAY CHIP 47	
R7126	EXB2HV470JV	ARRAY CHIP 47	
R7127	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7128	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7129	ERJ2GEJ680X	MGF CHIP 1/16W 68	
R7130	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7131	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7132	EXB2HV470JV	ARRAY CHIP 47	
R7133	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7134	ERJ2GEJ302X	MGF CHIP 1/16W 3K	
R7135	ERJ3EKF1000V	MGF CHIP 1/16W 100	
R7136	ERJ3EKF1000V	MGF CHIP 1/16W 100	
R7137	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7138	ERJ3EKF1001V	MGF CHIP 1/16W 1K	
R7139	ERJ3EKF4751V	MGF CHIP 1/16W 4.75K	
R7140	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R7141	ERJ3EKF2001V	MGF CHIP 1/16W 2K	
R7142	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7144	ERJ2GEJ105X	MGF CHIP 1/16W 1M	
R7145	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7146	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7147	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7148	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7149	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7150	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7151	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7152	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7153	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7156	EXB2HV820JV	ARRAY CHIP 82	
R7157	EXB2HV820JV	ARRAY CHIP 82	
R7158	EXB2HV820JV	ARRAY CHIP 82	
R7159	EXB2HV820JV	ARRAY CHIP 82	
R7160	EXB2HV820JV	ARRAY CHIP 82	
R7161	EXB2HV820JV	ARRAY CHIP 82	
R7162	EXB2HV820JV	ARRAY CHIP 82	
R7163	EXB2HV820JV	ARRAY CHIP 82	
R7164	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7165	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7166	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7167	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7168	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7169	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7170	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7171	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7172	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R7173	ERJ2GEJ182X	MGF CHIP 1/16W 1.8K	
R7174	ERJ2GEJ182X	MGF CHIP 1/16W 1.8K	
R7175	ERJ2GEJ680X	MGF CHIP 1/16W 68	
R7176	ERJ2GEJ680X	MGF CHIP 1/16W 68	
R7177	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R7185	ERJ3EKF5111V	MGF CHIP 1/16W 5.11K	
R7186	ERJ3EKF1002V	MGF CHIP 1/16W 10K	
R7187	ERJ3EKF2372V	MGF CHIP 1/16W 23.7K	
R7188	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7212	ERJ3EKF3302V	MGF CHIP 1/16W 33K	
R7213	ERJ3EKF3242V	MGF CHIP 1/16W 32.4K	
R7214	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7215	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7216	EXB2HV470JV	ARRAY CHIP 47	
R7217	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7218	EXB2HV470JV	ARRAY CHIP 47	
R7219	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7220	EXB2HV470JV	ARRAY CHIP 47	
R7221	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7222	EXB2HV470JV	ARRAY CHIP 47	
R7223	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7224	EXB2HV470JV	ARRAY CHIP 47	
R7225	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7226	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R7227	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7228	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7229	EXB2HV470JV	ARRAY CHIP 47	
R7230	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R7231	ERJ3EKF1001V	MGF CHIP 1/16W 1K	
R7232	ERJ3EKF1001V	MGF CHIP 1/16W 1K	
R7233	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7234	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7235	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7236	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7237	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7238	ERJ3EKF3302V	MGF CHIP 1/16W 33K	
R7239	ERJ3EKF3242V	MGF CHIP 1/16W 32.4K	
R7240	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7241	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7264	ERJ2GEJ332X	MGF CHIP 1/16W 3.3K	
R7265	ERJ3EKF2202V	MGF CHIP 1/16W 22K	
R7270	ERJ2GEJ301X	MGF CHIP 1/16W 300	
R7272	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7274	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7276	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7277	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7278	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7282	ERJ2GEJ332X	MGF CHIP 1/16W 3.3K	
R7284	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7285	ERJ2GEJ220X	MGF CHIP 1/16W 22	
R7286	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7287	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7288	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7289	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7290	ERJ2GEJ102X	MGF CHIP 1/16W 1K	
R7291	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R7292	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7293	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7301	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R7302	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7303	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7304	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7305	ERJ3GEYJ121V	MGF CHIP 1/16W 120	

Ref. No.	Part No.	Part Name & Description	Remarks
R7306	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7307	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7308	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7309	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7310	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7311	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7314	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7315	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7316	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7317	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7318	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7319	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7320	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7321	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7322	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7323	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7324	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7325	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7326	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7328	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7329	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7330	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7331	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7332	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7334	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7338	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R7341	ERJ2GEJ182X	MGF CHIP 1/16W 1.8K	
R7342	ERJ2GEJ182X	MGF CHIP 1/16W 1.8K	
R7343	ERJ2GEJ182X	MGF CHIP 1/16W 1.8K	
R7362	ERJ2GEJ821X	MGF CHIP 1/16W 820	
R7363	ERJ2GEJ332X	MGF CHIP 1/16W 3.3K	
R7365	EXB2HV470JV	ARRAY CHIP 47	
R7366	EXB2HV470JV	ARRAY CHIP 47	
R7367	EXB2HV470JV	ARRAY CHIP 47	
R7368	EXB2HV470JV	ARRAY CHIP 47	
R7369	EXB2HV470JV	ARRAY CHIP 47	
R7370	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R7371	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R7372	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R7373	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R7374	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R7375	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R7376	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R7380	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R7381	ERJ2GEJ330X	MGF CHIP 1/16W 33	
R7384	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7385	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R7386	ERJ3EKF1690V	MGF CHIP 1/16W 169	
R7388	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R7390	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R7391	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R7395	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R7396	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R7400	D0GA332JA015	MGF CHIP 1/16W 3.3K	
R7401	D0GA392JA015	MGF CHIP 1/16W 3.9K	
R7402	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R7403	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R7404	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R7405	J0JCC0000078	EMI FILTER CHIP	
R7406	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
R7407	ERJ2GEJ680X	MGF CHIP 1/16W 68	
R7408	ERJ2GEJ680X	MGF CHIP 1/16W 68	
R7409	ERJ2GEJ680X	MGF CHIP 1/16W 68	
R7411	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8001	ERJ3GEYJ181V	MGF CHIP 1/16W 180	
R8002	ERJ3GEYJ820V	MGF CHIP 1/16W 82	
R8003	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8004	ERJ3EKF2402V	MGF CHIP 1/16W 24K	
R8005	ERJ3EKF1002V	MGF CHIP 1/16W 10K	
R8006	ERJ3EKF6801V	MGF CHIP 1/16W 6.8K	
R8030	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R8056	ERJ2GEJ470X	MGF CHIP 1/16W 47	

Ref. No.	Part No.	Part Name & Description	Remarks
R8057	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8058	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8059	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8060	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8061	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8062	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8063	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8064	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8065	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8066	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8067	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8068	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8069	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8070	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8071	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8072	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8073	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8075	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8076	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8077	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8078	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8082	ERJ3EKF75R0V	MGF CHIP 1/16W 75	
R8083	ERJ2GEJ301X	MGF CHIP 1/16W 300	
R8086	ERJ2GEJ104X	MGF CHIP 1/16W 100K	
R8087	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8090	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8091	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8093	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8094	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8098	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8099	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8100	ERJ2GEJ470X	MGF CHIP 1/16W 47	
R8101	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R8102	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R8103	ERJ3GEYJ750V	MGF CHIP 1/16W 75	
R8105	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8106	ERJ3GEYJ202V	MGF CHIP 1/16W 2K	
R8107	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8108	ERJ3GEYJ183V	MGF CHIP 1/16W 18K	
R8116	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8117	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8118	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8122	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8123	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8124	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8125	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R8128	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8129	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8130	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8131	ERJ3EKF91R0V	MGF CHIP 1/16W 91	
R8133	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8135	ERJ3GEYJ392V	MGF CHIP 1/16W 3.9K	
R8136	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8138	ERJ3GEYJ121V	MGF CHIP 1/16W 120	
R8201	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8202	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8203	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8204	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8205	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8206	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8207	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8208	J0JBC0000080	BEAD INDUCTOR CHIP	
R8209	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8210	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8211	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8212	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8213	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8214	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8215	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8216	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8217	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8218	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8219	ERJ3GEYJ560V	MGF CHIP 1/16W 56	

Ref. No.	Part No.	Part Name & Description	Remarks
R8220	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8221	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8222	ECJ1VC1H470J	C CHIP 50V 47PF	
R8225	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8227	ERJ2GEJ221X	MGF CHIP 1/16W 220	
R8229	ERJ2GEJ103X	MGF CHIP 1/16W 10K	
R8232	ERJ2GEJ221X	MGF CHIP 1/16W 220	
R8233	ERJ3EKF2700V	MGF CHIP 1/16W 270	
R8234	ERJ3EKF2700V	MGF CHIP 1/16W 270	
R8235	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8410	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8412	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8416	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8419	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8426	EXB38V560JV	ARRAY CHIP 56	
R8427	EXB38V560JV	ARRAY CHIP 56	
R8428	EXB38V560JV	ARRAY CHIP 56	
R8429	EXB38V560JV	ARRAY CHIP 56	
R8430	EXB38V560JV	ARRAY CHIP 56	
R8431	EXB38V560JV	ARRAY CHIP 56	
R8432	EXB38V560JV	ARRAY CHIP 56	
R8433	EXB38V560JV	ARRAY CHIP 56	
R8434	EXB38V560JV	ARRAY CHIP 56	
R8435	EXB38V560JV	ARRAY CHIP 56	
R8436	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8439	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8440	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8443	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8444	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8454	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8455	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8456	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8457	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8458	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8459	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8460	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8461	ERJ3GEYJ332V	MGF CHIP 1/16W 3.3K	
R8462	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8463	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8464	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8465	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8466	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8467	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8468	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8469	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R8473	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8475	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8476	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8477	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8479	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8480	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8481	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8484	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8500	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8501	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8510	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8511	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8518	ERJ3GEYJ330V	MGF CHIP 1/16W 33	
R8519	EXB38V473JV	ARRAY CHIP 47K	
R8520	EXB38V473JV	ARRAY CHIP 47K	
R8801	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R8802	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8806	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8807	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8808	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8809	ERJ3GEYJ682V	MGF CHIP 1/16W 6.8K	
R8810	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8811	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8812	ERJ3GEYJ473V	MGF CHIP 1/16W 47K	
R8813	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
R8814	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
R8815	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R8820	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8821	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8822	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8823	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8825	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8828	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8829	ERJ2GE0R00X	MGF CHIP 1/16W 0	
R8841	ERJ3GEYJ221V	MGF CHIP 1/16W 220	
R8843	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8846	ERJ3EKF1202V	MGF CHIP 1/16W 12K	
R8848	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8851	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8852	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8854	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8856	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8857	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8858	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8859	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8860	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8861	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8862	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8864	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8868	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8869	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8870	ERJ3GEYJ392V	MGF CHIP 1/16W 3.9K	
R8873	ERJ3GEYJ392V	MGF CHIP 1/16W 3.9K	
R8874	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8876	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8877	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8878	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8879	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R8888	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8889	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8891	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8892	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8894	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R8895	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8896	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8900	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8901	ERJ2GEJ101X	MGF CHIP 1/16W 100	
R8902	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R8918	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8920	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8921	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8922	ERJ3GEYJ560V	MGF CHIP 1/16W 56	
R8923	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8924	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8928	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8929	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8930	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8931	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8932	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8933	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R8938	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8944	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8945	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8958	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8959	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8960	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R8961	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
JS4001	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4002	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4003	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
JS4502	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4503	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4504	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4505	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS4506	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS5500	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS5501	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS5504	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
JS7101	ERJ2GE0R00X	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
JS7102	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7103	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7104	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7105	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7106	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7107	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7108	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7109	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7110	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7121	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7122	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7123	ERJ2GE0R00X	MGF CHIP 1/16W 0	
JS7124	ERJ2GE0R00X	MGF CHIP 1/16W 0	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C1102	F1H1C104A065	C CHIP 16V 0.1UF	
C1103	F1H1C104A065	C CHIP 16V 0.1UF	
C1104	F1H1C104A065	C CHIP 16V 0.1UF	
C1105	F1H1C104A065	C CHIP 16V 0.1UF	
C1107	F1H1A224A025	C CHIP 10V 0.22UF	
C1108	F1H1A474A025	C CHIP 10V 0.47UF	
C1109	F1H1A105A025	C CHIP 10V 1UF	
C1110	F1H1A105A025	C CHIP 10V 1UF	
C1111	F1H1C104A065	C CHIP 16V 0.1UF	
C1113	F1H1A105A025	C CHIP 10V 1UF	
C1120	F1H1C104A065	C CHIP 16V 0.1UF	
C1121	F1H1C104A065	C CHIP 16V 0.1UF	
C1122	F1H1C104A065	C CHIP 16V 0.1UF	
C1123	F1H1H332A219	C CHIP 50V 3300PF	
C1124	F1H1C104A065	C CHIP 16V 0.1UF	
C1126	F1H1C104A065	C CHIP 16V 0.1UF	
C1127	F1H1C104A065	C CHIP 16V 0.1UF	
C1130	F1H1A105A025	C CHIP 10V 1UF	
C1133	F1J0J2260004	C CHIP 6.3V 22UF	
C1134	F1J0J2260004	C CHIP 6.3V 22UF	
C1137	F2G1C4710021	ELECTROLYTIC CHIP 16V 470UF	
C1139	F1H1A224A025	C CHIP 10V 0.22UF	
C1140	F2G1C6810004	ELECTROLYTIC CHIP 16V 680UF	
C1141	EEEHB0J101P	ELECTROLYTIC 6.3V 100UF	
C1143	F1J0J2260004	C CHIP 6.3V 22UF	
C1144	F1J0J2260004	C CHIP 6.3V 22UF	
C1145	EEEHB0J101P	ELECTROLYTIC 6.3V 100UF	
C1147	F1L1C2260012	C CHIP 16V 22UF	
C1148	F1H1H332A219	C CHIP 50V 3300PF	
C1149	F1L1C2260012	C CHIP 16V 22UF	
C1150	F1H1A224A025	C CHIP 10V 0.22UF	
C1151	F2G1C4710021	ELECTROLYTIC CHIP 16V 470UF	
C1152	F2G1C6810004	ELECTROLYTIC CHIP 16V 680UF	
C1160	F1J0J2260004	C CHIP 6.3V 22UF	
C1161	F1H1C104A065	C CHIP 16V 0.1UF	
C1162	F1H1C104A065	C CHIP 16V 0.1UF	
C1171	F1J0J2260004	C CHIP 6.3V 22UF	
C1202	F1H1C104A065	C CHIP 16V 0.1UF	
C1203	F1H1C104A065	C CHIP 16V 0.1UF	
C1204	F1H1C104A065	C CHIP 16V 0.1UF	
C1205	F1H1H332A219	C CHIP 50V 3300PF	
C1206	F1H1C104A065	C CHIP 16V 0.1UF	
C1207	F1H1C104A065	C CHIP 16V 0.1UF	
C1208	F1H1C104A065	C CHIP 16V 0.1UF	
C1210	F1J0J2260004	C CHIP 6.3V 22UF	
C1211	F1J0J2260004	C CHIP 6.3V 22UF	
C1213	F1J0J2260004	C CHIP 6.3V 22UF	
C1214	F1J0J2260004	C CHIP 6.3V 22UF	
C1216	F1L1C2260012	C CHIP 16V 22UF	
C1217	F1H1H332A219	C CHIP 50V 3300PF	
C1218	F1L1C2260012	C CHIP 16V 22UF	
C1219	F1J0J2260004	C CHIP 6.3V 22UF	
C1227	F1J0J2260004	C CHIP 6.3V 22UF	
C1228	F1H1C104A065	C CHIP 16V 0.1UF	
C1232	F1H1C104A065	C CHIP 16V 0.1UF	
C1236	F1H1C104A065	C CHIP 16V 0.1UF	
C3001	F2G1C1010014	ELECTROLYTIC CHIP 16V 100UF	
C3003	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3004	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3005	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3006	F1H1C104A008	C CHIP 16V 0.1UF	
C3009	F1H1C104A008	C CHIP 16V 0.1UF	
C3012	F1H1A105A025	C CHIP 10V 1UF	
C3013	F1H1A105A025	C CHIP 10V 1UF	
C3017	F1H1C104A008	C CHIP 16V 0.1UF	
C3018	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C3019	F1H1A105A025	C CHIP 10V 1UF	
C3020	F1H1A105A025	C CHIP 10V 1UF	
C3026	F1H1A105A025	C CHIP 10V 1UF	
C3027	F1H1A105A025	C CHIP 10V 1UF	
C3028	F1H1A105A025	C CHIP 10V 1UF	
C3032	F1H1C104A008	C CHIP 16V 0.1UF	
C3033	F1H1A105A025	C CHIP 10V 1UF	
C3034	F1H1A105A025	C CHIP 10V 1UF	
C3035	F1H1A105A025	C CHIP 10V 1UF	
C3036	F1H1A105A025	C CHIP 10V 1UF	
C3037	F1H1A105A025	C CHIP 10V 1UF	
C3038	F1H1A105A025	C CHIP 10V 1UF	
C3039	F2G1C1000014	ELECTROLYTIC CHIP 16V 10UF	
C3040	F1H1A105A025	C CHIP 10V 1UF	
C3041	F1H1E223A029	C CHIP 25V 0.022UF	
C3043	ECJ2YB1C334K	C CHIP 16V 0.33UF	
C3046	F1H1A105A025	C CHIP 10V 1UF	
C3059	ECJ1VC1H101J	C CHIP 50V 100PF	
C3060	F1H1C104A008	C CHIP 16V 0.1UF	
C4001	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C4002	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4003	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C4004	ECJ1VC1H101J	C CHIP 50V 100PF	
C4005	ECJ1VC1H101J	C CHIP 50V 100PF	
C4006	F1J1A106A024	C CHIP 10V 10UF	
C4007	F1J1A106A024	C CHIP 10V 10UF	
C4008	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C4009	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C4010	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4011	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4012	F1H1E104A030	C CHIP 25V 0.1UF	
C4013	F1H1E104A030	C CHIP 25V 0.1UF	
C4014	F1H1E104A030	C CHIP 25V 0.1UF	
C4015	F1H1E104A030	C CHIP 25V 0.1UF	
C4016	F1H1E104A030	C CHIP 25V 0.1UF	
C4017	F1H1E104A030	C CHIP 25V 0.1UF	
C4018	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4019	F1H1E104A030	C CHIP 25V 0.1UF	
C4020	F1H1E104A030	C CHIP 25V 0.1UF	
C4021	F1H1E104A030	C CHIP 25V 0.1UF	
C4022	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4023	F1H1E104A030	C CHIP 25V 0.1UF	
C4025	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C4026	F1H1E104A030	C CHIP 25V 0.1UF	
C4028	F1H1H120A230	C CHIP 50V 12PF	
C4029	F1H1H120A230	C CHIP 50V 12PF	
C4030	F1H1E104A030	C CHIP 25V 0.1UF	
C4031	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4033	F1H1E104A030	C CHIP 25V 0.1UF	
C4034	F1H1H102A219	C CHIP 50V 1000PF	
C4036	F1H1E104A030	C CHIP 25V 0.1UF	
C4037	F1H1E104A030	C CHIP 25V 0.1UF	
C4039	ECJ2FF1A106Z	C CHIP 10V 10UF	
C4043	ECJ2FF1C475Z	C CHIP 16V 4.7UF	
C4044	F1J0J2260002	C CHIP 6.3V 22UF	
C4046	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4047	ECJ1VC1H181J	C CHIP 50V 180PF	
C4048	ECJ1VC1H181J	C CHIP 50V 180PF	
C4049	F1H1H330A230	C CHIP 50V 33PF	
C4050	F1H1H330A230	C CHIP 50V 33PF	
C4051	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4058	F1J1A106A024	C CHIP 10V 10UF	
C4059	F1J1A106A024	C CHIP 10V 10UF	
C4060	F1H1E104A030	C CHIP 25V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C4061	ECJ1VB0J225K	C CHIP 6.3V 2.2UF	
C4062	F1H1H471A189	C CHIP 50V 470PF	
C4063	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C4501	F1H1E104A030	C CHIP 25V 0.1UF	
C4502	F1H1E104A030	C CHIP 25V 0.1UF	
C4503	F1H1E104A030	C CHIP 25V 0.1UF	
C4504	F1H1E104A030	C CHIP 25V 0.1UF	
C4505	F1H1E104A030	C CHIP 25V 0.1UF	
C4506	ECJ1VB1H333K	C CHIP 50V 0.033UF	
C4507	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4508	F1J1H105A449	C CHIP 50V 1UF	
C4509	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4510	F1J1H105A449	C CHIP 50V 1UF	
C4511	ECJ1VB1H333K	C CHIP 50V 0.033UF	
C4512	ECJ1VB1H333K	C CHIP 50V 0.033UF	
C4513	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4514	F1J1H105A449	C CHIP 50V 1UF	
C4515	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4516	F1J1H105A449	C CHIP 50V 1UF	
C4517	ECJ1VB1H333K	C CHIP 50V 0.033UF	
C4518	F1H1E104A030	C CHIP 25V 0.1UF	
C4519	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4520	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4521	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4522	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4523	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4524	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4525	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4526	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4527	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4528	ECJ1VB1H104K	C CHIP 50V 0.1UF	
C4529	F2G1C2200012	ELECTROLYTIC CHIP 16V 22UF	
C4530	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4531	ECJ1VF1H104Z	C CHIP 50V 0.1UF	
C4532	F1H1E104A030	C CHIP 25V 0.1UF	
C4538	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4539	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4540	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4541	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C4542	F1H1H102A219	C CHIP 50V 1000PF	
C4543	F1H1H102A219	C CHIP 50V 1000PF	
C4544	F1H1H102A219	C CHIP 50V 1000PF	
C4545	F1H1H102A219	C CHIP 50V 1000PF	
C5000	F1H1C104A065	C CHIP 16V 0.1UF	
C5001	F1H1C104A065	C CHIP 16V 0.1UF	
C5003	F1H1C104A065	C CHIP 16V 0.1UF	
C5017	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5018	F1H1A105A025	C CHIP 10V 1UF	
C5021	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5500	F1H1E104A030	C CHIP 25V 0.1UF	
C5501	F1H1E104A030	C CHIP 25V 0.1UF	
C5502	F1H1E104A030	C CHIP 25V 0.1UF	
C5503	F1H1E104A030	C CHIP 25V 0.1UF	
C5508	F2G0J2200006	ELECTROLYTIC CHIP 6.3V 22UF	
C5509	F2G0J2200006	ELECTROLYTIC CHIP 6.3V 22UF	
C5510	F1H1E104A030	C CHIP 25V 0.1UF	
C5511	F1H1E104A030	C CHIP 25V 0.1UF	
C5513	F1H1C104A065	C CHIP 16V 0.1UF	
C5514	F1H1C104A065	C CHIP 16V 0.1UF	
C5515	F1H1C104A065	C CHIP 16V 0.1UF	
C5517	F1H1C104A065	C CHIP 16V 0.1UF	
C5520	F1J1A106A024	C CHIP 10V 10UF	
C5521	F1H1C104A065	C CHIP 16V 0.1UF	
C5525	ECJ1VB1C105K	C CHIP 16V 1UF	
C5527	F1H1A105A025	C CHIP 10V 1UF	
C5528	F1H1C104A065	C CHIP 16V 0.1UF	
C5531	F1H1C104A065	C CHIP 16V 0.1UF	
C5533	ECJ1VC1H680J	C CHIP 50V 68PF	
C5538	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C5539	F1J1A106A024	C CHIP 10V 10UF	
C5541	ECJ1VC1H471J	C CHIP 50V 470PF	
C5543	F1H1C104A065	C CHIP 16V 0.1UF	
C5544	F1H1C104A065	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C5545	F1H1C104A065	C CHIP 16V 0.1UF	
C5546	ECJ1VB0J225K	C CHIP 6.3V 2.2UF	
C5547	F1H1C104A065	C CHIP 16V 0.1UF	
C5548	F1H1C104A065	C CHIP 16V 0.1UF	
C5549	F1H1C104A065	C CHIP 16V 0.1UF	
C5550	F1H1C104A065	C CHIP 16V 0.1UF	
C5552	F1H1C104A065	C CHIP 16V 0.1UF	
C5553	F1H1H102A219	C CHIP 50V 1000PF	
C5555	F1J1A106A024	C CHIP 10V 10UF	
C5556	F1J1A106A024	C CHIP 10V 10UF	
C5557	F1H1C104A065	C CHIP 16V 0.1UF	
C5559	F1H1C104A065	C CHIP 16V 0.1UF	
C5560	F1H1C104A065	C CHIP 16V 0.1UF	
C5562	ECJ1VB1H822K	C CHIP 50V 8200PF	
C5563	ECJ1VB1C823K	C CHIP 16V 0.082UF	
C5564	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5565	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5566	ECJ1VB1C393K	C CHIP 16V 0.039UF	
C5568	F1H1C104A065	C CHIP 16V 0.1UF	
C5569	ECJ1VB0J684K	C CHIP 6.3V 0.68UF	
C5570	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C5572	F1H1C104A065	C CHIP 16V 0.1UF	
C5573	F1H1C104A065	C CHIP 16V 0.1UF	
C5574	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5575	F1H1A105A025	C CHIP 10V 1UF	
C5576	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C5577	F1H1C104A065	C CHIP 16V 0.1UF	
C5578	F1H1C104A065	C CHIP 16V 0.1UF	
C5580	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5581	F1H1A105A025	C CHIP 10V 1UF	
C5582	F1H1C104A065	C CHIP 16V 0.1UF	
C5583	F1H1C104A065	C CHIP 16V 0.1UF	
C5584	F1H1A105A025	C CHIP 10V 1UF	
C5585	F1H1A105A025	C CHIP 10V 1UF	
C5586	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5587	F1H1C104A065	C CHIP 16V 0.1UF	
C5588	ECJ1VB1C823K	C CHIP 16V 0.082UF	
C5589	ECJ1VC1H180J	C CHIP 50V 18PF	
C5590	F1H1H220A230	C CHIP 50V 22PF	
C5593	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5595	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5596	F1H1E104A030	C CHIP 25V 0.1UF	
C5598	F1H1A105A025	C CHIP 10V 1UF	
C5601	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5602	F1H1C104A065	C CHIP 16V 0.1UF	
C5604	ECJ1VB0J225K	C CHIP 6.3V 2.2UF	
C5605	F1H1E104A030	C CHIP 25V 0.1UF	
C5607	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C5609	F1H1A105A025	C CHIP 10V 1UF	
C5611	F1H1A105A025	C CHIP 10V 1UF	
C5612	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5613	F1H1A105A025	C CHIP 10V 1UF	
C5614	F1H1E104A030	C CHIP 25V 0.1UF	
C5615	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5616	F1H1E104A030	C CHIP 25V 0.1UF	
C5617	F1H1E104A030	C CHIP 25V 0.1UF	
C5618	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5619	F1H1E104A030	C CHIP 25V 0.1UF	
C5620	F1H1A105A025	C CHIP 10V 1UF	
C5623	F1H1C104A065	C CHIP 16V 0.1UF	
C5624	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C5625	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C6003	F1H1C104A065	C CHIP 16V 0.1UF	
C6004	F1H1H102A219	C CHIP 50V 1000PF	
C6013	F1H1A224A025	C CHIP 10V 0.22UF	
C6017	F1H1A105A025	C CHIP 10V 1UF	
C6018	F1J1A106A024	C CHIP 10V 10UF	
C6019	F1J1A106A024	C CHIP 10V 10UF	
C6020	ECJ1VC1H101J	C CHIP 50V 100PF	
C6021	F1J1A106A024	C CHIP 10V 10UF	
C6022	F1H1C104A065	C CHIP 16V 0.1UF	
C6023	F1H1C104A065	C CHIP 16V 0.1UF	
C6024	F1H1C104A065	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C6025	F1H1C104A065	C CHIP 16V 0.1UF	
C6026	F1H1C104A065	C CHIP 16V 0.1UF	
C6027	F1H1C104A065	C CHIP 16V 0.1UF	
C6029	F1H1C104A065	C CHIP 16V 0.1UF	
C6031	F1H1C104A065	C CHIP 16V 0.1UF	
C6034	F1H1H220A230	C CHIP 50V 22PF	
C6035	ECJ1VC1H270J	C CHIP 50V 27PF	
C6037	F1H1H102A219	C CHIP 50V 1000PF	
C6038	F1H1A105A025	C CHIP 10V 1UF	
C6039	F1H1A105A025	C CHIP 10V 1UF	
C6040	F1H1A105A025	C CHIP 10V 1UF	
C6041	F1H1H102A219	C CHIP 50V 1000PF	
C6042	F1H1H102A219	C CHIP 50V 1000PF	
C6043	F1H1H102A219	C CHIP 50V 1000PF	
C6044	F1H1H102A219	C CHIP 50V 1000PF	
C6045	F1H1H102A219	C CHIP 50V 1000PF	
C6048	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C6049	F1H1H102A219	C CHIP 50V 1000PF	
C6051	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C7002	F1H1C104A065	C CHIP 16V 0.1UF	
C7003	F1H1H102A219	C CHIP 50V 1000PF	
C7101	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C7102	F1G1A1040006	C CHIP 10V 0.1UF	
C7103	F1G1C103A048	C CHIP 16V 0.01UF	
C7105	F1H1A105A025	C CHIP 10V 1UF	
C7106	F1G1A1040006	C CHIP 10V 0.1UF	
C7107	F1G1C103A048	C CHIP 16V 0.01UF	
C7108	F1G1A1040006	C CHIP 10V 0.1UF	
C7109	ECJ1VC1H221J	C CHIP 50V 220PF	
C7110	F1H1A105A025	C CHIP 10V 1UF	
C7111	F1G1C103A048	C CHIP 16V 0.01UF	
C7112	F1G1A1040006	C CHIP 10V 0.1UF	
C7113	F1G1A1040006	C CHIP 10V 0.1UF	
C7114	ECJ1VC1H680J	C CHIP 50V 68PF	
C7116	F1G1A1040006	C CHIP 10V 0.1UF	
C7117	F1H1H120A230	C CHIP 50V 12PF	
C7118	ECJ1VC1H100D	C CHIP 50V 10PF	
C7119	F1H1A105A025	C CHIP 10V 1UF	
C7120	F1G1A1040006	C CHIP 10V 0.1UF	
C7121	F1G1H1020008	C CHIP 50V 1000PF	
C7123	F1G1A1040006	C CHIP 10V 0.1UF	
C7125	F1H1A105A025	C CHIP 10V 1UF	
C7126	F1G1A1040006	C CHIP 10V 0.1UF	
C7127	F1G1H1020008	C CHIP 50V 1000PF	
C7128	F1H1A105A025	C CHIP 10V 1UF	
C7129	F1G1A1040006	C CHIP 10V 0.1UF	
C7130	F1H1A105A025	C CHIP 10V 1UF	
C7132	F1J1A106A024	C CHIP 10V 10UF	
C7133	F1G1A1040006	C CHIP 10V 0.1UF	
C7134	F1G1A1040006	C CHIP 10V 0.1UF	
C7136	F1J1A106A024	C CHIP 10V 10UF	
C7137	F1H1A105A025	C CHIP 10V 1UF	
C7138	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C7139	F1G1A1040006	C CHIP 10V 0.1UF	
C7141	F1G1H1020008	C CHIP 50V 1000PF	
C7142	F1G1A1040006	C CHIP 10V 0.1UF	
C7143	F1H1A105A025	C CHIP 10V 1UF	
C7144	F1G1A1040006	C CHIP 10V 0.1UF	
C7145	F1G1H1020008	C CHIP 50V 1000PF	
C7146	F1G1H1020008	C CHIP 50V 1000PF	
C7147	F1G1A1040006	C CHIP 10V 0.1UF	
C7148	F1G1A1040006	C CHIP 10V 0.1UF	
C7149	F1G1H1020008	C CHIP 50V 1000PF	
C7150	F1H1A105A025	C CHIP 10V 1UF	
C7151	F1G1A1040006	C CHIP 10V 0.1UF	
C7152	F1G1H1020008	C CHIP 50V 1000PF	
C7154	F1G1A1040006	C CHIP 10V 0.1UF	
C7155	F1G1H1020008	C CHIP 50V 1000PF	
C7157	F1G1A1040006	C CHIP 10V 0.1UF	
C7158	F1G1A1040006	C CHIP 10V 0.1UF	
C7159	F1G1A1040006	C CHIP 10V 0.1UF	
C7160	F1G1H1020008	C CHIP 50V 1000PF	
C7161	F1H1A105A025	C CHIP 10V 1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C7162	F1G1A1040006	C CHIP 10V 0.1UF	
C7163	F1G1A1040006	C CHIP 10V 0.1UF	
C7164	F1G1H1020008	C CHIP 50V 1000PF	
C7165	F1G1H1020008	C CHIP 50V 1000PF	
C7166	ECGRL0G680ER	ELECTROLYTIC CHIP 4V 68PF	
C7167	F2G0J4700012	ELECTROLYTIC CHIP 6.3V 47UF	
C7168	F1G1A1040006	C CHIP 10V 0.1UF	
C7169	F1G1H1020008	C CHIP 50V 1000PF	
C7170	F1G1H1020008	C CHIP 50V 1000PF	
C7171	F1G1H1020008	C CHIP 50V 1000PF	
C7172	F1G1A1040006	C CHIP 10V 0.1UF	
C7173	F1G1A1040006	C CHIP 10V 0.1UF	
C7174	F1G1H1020008	C CHIP 50V 1000PF	
C7175	F1G1H1020008	C CHIP 50V 1000PF	
C7176	F1H1A105A025	C CHIP 10V 1UF	
C7177	F1G1A1040006	C CHIP 10V 0.1UF	
C7178	F1G1H1020008	C CHIP 50V 1000PF	
C7179	F1G1H1020008	C CHIP 50V 1000PF	
C7180	F1G1H1020008	C CHIP 50V 1000PF	
C7181	F1G1A1040006	C CHIP 10V 0.1UF	
C7182	F1G1H1020008	C CHIP 50V 1000PF	
C7183	F1G1H1020008	C CHIP 50V 1000PF	
C7185	F1G1H1020008	C CHIP 50V 1000PF	
C7186	F1G1A1040006	C CHIP 10V 0.1UF	
C7187	F1G1H1020008	C CHIP 50V 1000PF	
C7188	F1H1A105A025	C CHIP 10V 1UF	
C7190	F1G1H1020008	C CHIP 50V 1000PF	
C7191	F1G1H1020008	C CHIP 50V 1000PF	
C7192	F1G1A1040006	C CHIP 10V 0.1UF	
C7193	F1G1H1020008	C CHIP 50V 1000PF	
C7194	F1G1H1020008	C CHIP 50V 1000PF	
C7197	F1H1A105A025	C CHIP 10V 1UF	
C7198	F1G1A1040006	C CHIP 10V 0.1UF	
C7199	F1G1H1020008	C CHIP 50V 1000PF	
C7200	F1G1A1040006	C CHIP 10V 0.1UF	
C7201	F1G1H1020008	C CHIP 50V 1000PF	
C7202	F1G1A1040006	C CHIP 10V 0.1UF	
C7203	F1G1A1040006	C CHIP 10V 0.1UF	
C7204	F1G1H1020008	C CHIP 50V 1000PF	
C7205	F1G1A1040006	C CHIP 10V 0.1UF	
C7206	F1G1H1020008	C CHIP 50V 1000PF	
C7207	F1G1A1040006	C CHIP 10V 0.1UF	
C7208	F1G1H1020008	C CHIP 50V 1000PF	
C7209	F1H1A105A025	C CHIP 10V 1UF	
C7210	F1H1A105A025	C CHIP 10V 1UF	
C7211	F1G1A1040006	C CHIP 10V 0.1UF	
C7212	F1G1H1020008	C CHIP 50V 1000PF	
C7213	F1G1H1020008	C CHIP 50V 1000PF	
C7214	F1G1A1040006	C CHIP 10V 0.1UF	
C7215	F1H1A105A025	C CHIP 10V 1UF	
C7216	F1G1H1020008	C CHIP 50V 1000PF	
C7218	F1J1A106A024	C CHIP 10V 10UF	
C7221	F1G1A1040006	C CHIP 10V 0.1UF	
C7222	F1H1A105A025	C CHIP 10V 1UF	
C7223	F1G1A1040006	C CHIP 10V 0.1UF	
C7224	F1G1A1040006	C CHIP 10V 0.1UF	
C7225	F1G1A1040006	C CHIP 10V 0.1UF	
C7226	F1G1A1040006	C CHIP 10V 0.1UF	
C7227	F1G1A1040006	C CHIP 10V 0.1UF	
C7228	F1G1A1040006	C CHIP 10V 0.1UF	
C7229	F1G1A1040006	C CHIP 10V 0.1UF	
C7230	F1G1A1040006	C CHIP 10V 0.1UF	
C7231	F1G1A1040006	C CHIP 10V 0.1UF	
C7232	F1G1A1040006	C CHIP 10V 0.1UF	
C7233	F1G1A1040006	C CHIP 10V 0.1UF	
C7234	F1G1A1040006	C CHIP 10V 0.1UF	
C7235	F1G1A1040006	C CHIP 10V 0.1UF	
C7236	F1G1A1040006	C CHIP 10V 0.1UF	
C7237	F1G1A1040006	C CHIP 10V 0.1UF	
C7238	F1G1A1040006	C CHIP 10V 0.1UF	
C7239	F1G1A1040006	C CHIP 10V 0.1UF	
C7240	F1G1A1040006	C CHIP 10V 0.1UF	
C7241	F1G1A1040006	C CHIP 10V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C7242	F1G1A1040006	C CHIP 10V 0.1UF	
C7243	F1G1A1040006	C CHIP 10V 0.1UF	
C7244	F1G1A1040006	C CHIP 10V 0.1UF	
C7245	F1J1A106A024	C CHIP 10V 10UF	
C7246	F1J1A106A024	C CHIP 10V 10UF	
C7247	F1G1A1040006	C CHIP 10V 0.1UF	
C7336	F1G1H1020008	C CHIP 50V 1000PF	
C7370	F1J1A106A024	C CHIP 10V 10UF	
C7371	F1J1A106A024	C CHIP 10V 10UF	
C7372	F1G1A1040006	C CHIP 10V 0.1UF	
C7373	F1H1A105A025	C CHIP 10V 1UF	
C7374	F1G1A1040006	C CHIP 10V 0.1UF	
C7375	F2H0G101A005	ELECTROLYTIC CHIP 4V 100UF	
C7376	ECJ1VC1H471J	C CHIP 50V 470PF	
C7378	F1G1A1040006	C CHIP 10V 0.1UF	
C7379	F1G1C103A048	C CHIP 16V 0.01UF	
C7380	F1G1A1040006	C CHIP 10V 0.1UF	
C7381	F1G1C103A048	C CHIP 16V 0.01UF	
C7382	F1G1A1040006	C CHIP 10V 0.1UF	
C7383	F1G1C103A048	C CHIP 16V 0.01UF	
C7384	F1G1A1040006	C CHIP 10V 0.1UF	
C7385	F1G1C103A048	C CHIP 16V 0.01UF	
C7386	F1G1A1040006	C CHIP 10V 0.1UF	
C7387	F1G1A1040006	C CHIP 10V 0.1UF	
C7388	F1G1A1040006	C CHIP 10V 0.1UF	
C7389	F1G1C103A048	C CHIP 16V 0.01UF	
C7390	F1G1A1040006	C CHIP 10V 0.1UF	
C7391	F1G1C103A048	C CHIP 16V 0.01UF	
C7392	F1G1A1040006	C CHIP 10V 0.1UF	
C7393	F1G1A1040006	C CHIP 10V 0.1UF	
C7394	F1G1C103A048	C CHIP 16V 0.01UF	
C7395	F1G1A1040006	C CHIP 10V 0.1UF	
C7396	F1G1C103A048	C CHIP 16V 0.01UF	
C7397	F1G1A1040006	C CHIP 10V 0.1UF	
C7398	F1G1C103A048	C CHIP 16V 0.01UF	
C7399	F1G1A1040006	C CHIP 10V 0.1UF	
C7400	F1G1C103A048	C CHIP 16V 0.01UF	
C7401	F1G1A1040006	C CHIP 10V 0.1UF	
C7402	F1G1C103A048	C CHIP 16V 0.01UF	
C7403	F1G1A1040006	C CHIP 10V 0.1UF	
C7404	F1G1C103A048	C CHIP 16V 0.01UF	
C7407	F1J1A106A024	C CHIP 10V 10UF	
C7408	F1G1A1040006	C CHIP 10V 0.1UF	
C7409	F1H1A105A025	C CHIP 10V 1UF	
C7411	F1G1A1040006	C CHIP 10V 0.1UF	
C7412	F2H0G101A005	ELECTROLYTIC CHIP 4V 100UF	
C7413	ECJ1VC1H471J	C CHIP 50V 470PF	
C7444	F1G1A1040006	C CHIP 10V 0.1UF	
C7445	F1G1H1020008	C CHIP 50V 1000PF	
C7446	F1G1A1040006	C CHIP 10V 0.1UF	
C7449	F1G1A1040006	C CHIP 10V 0.1UF	
C7452	F2G0J3310025	ELECTROLYTIC CHIP 6.3V 330UF	
C7453	F1J1A106A024	C CHIP 10V 10UF	
C7454	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C7455	F1G1A1040006	C CHIP 10V 0.1UF	
C7456	F1G1A1040006	C CHIP 10V 0.1UF	
C7457	F1G1A1040006	C CHIP 10V 0.1UF	
C7458	EEEHB0G470R	ELECTROLYTIC 4V 47UF	
C7459	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C7462	F1H1A105A025	C CHIP 10V 1UF	
C7463	F1G1A1040006	C CHIP 10V 0.1UF	
C7464	EEEHB0G470R	ELECTROLYTIC 4V 47UF	
C7465	F1G1A1040006	C CHIP 10V 0.1UF	
C7466	F1G1A1040006	C CHIP 10V 0.1UF	
C7467	F1G1A1040006	C CHIP 10V 0.1UF	
C7468	F1G1A1040006	C CHIP 10V 0.1UF	
C7469	F1G1A1040006	C CHIP 10V 0.1UF	
C7470	F1G1A1040006	C CHIP 10V 0.1UF	
C7471	F1G1A1040006	C CHIP 10V 0.1UF	
C7472	F1G1A1040006	C CHIP 10V 0.1UF	
C7473	F1G1A1040006	C CHIP 10V 0.1UF	
C7474	F1G1A1040006	C CHIP 10V 0.1UF	
C7475	F1G1A1040006	C CHIP 10V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C7476	F1G1A1040006	C CHIP 10V 0.1UF	
C7477	F1G1A1040006	C CHIP 10V 0.1UF	
C7478	F1G1A1040006	C CHIP 10V 0.1UF	
C7479	F1G1A1040006	C CHIP 10V 0.1UF	
C7480	F1G1A1040006	C CHIP 10V 0.1UF	
C7481	F1G1A1040006	C CHIP 10V 0.1UF	
C7482	F1G1A1040006	C CHIP 10V 0.1UF	
C7483	F1G1A1040006	C CHIP 10V 0.1UF	
C7484	F1G1A1040006	C CHIP 10V 0.1UF	
C7485	F1G1A1040006	C CHIP 10V 0.1UF	
C7486	F1G1A1040006	C CHIP 10V 0.1UF	
C7487	F1G1A1040006	C CHIP 10V 0.1UF	
C7488	F1G1A1040006	C CHIP 10V 0.1UF	
C7489	F1G1A1040006	C CHIP 10V 0.1UF	
C7490	F1G1A1040006	C CHIP 10V 0.1UF	
C7491	F1G1A1040006	C CHIP 10V 0.1UF	
C7492	F1G1A1040006	C CHIP 10V 0.1UF	
C7493	F1J1A106A024	C CHIP 10V 10UF	
C7494	ECJ1VB1C223K	C CHIP 25V 0.022UF	
C7495	F1G1A1040006	C CHIP 10V 0.1UF	
C7496	F1G1A1040006	C CHIP 10V 0.1UF	
C7497	F1G1H1020008	C CHIP 50V 1000PF	
C7500	F1H1A105A025	C CHIP 10V 1UF	
C7501	F1H1A105A025	C CHIP 10V 1UF	
C7502	F1J1C1050011	C CHIP 16V 1UF	
C7504	F1H1A105A025	C CHIP 10V 1UF	
C7506	F1G1H1020008	C CHIP 50V 1000PF	
C7507	F1G1H1020008	C CHIP 50V 1000PF	
C7508	F1H1H120A230	C CHIP 50V 12PF	
C7509	F1H1H120A230	C CHIP 50V 12PF	
C7511	F1H1H220A230	C CHIP 50V 22PF	
C8001	F1H1C104A065	C CHIP 16V 0.1UF	
C8002	F1H1A105A025	C CHIP 10V 1UF	
C8003	F1H1A105A025	C CHIP 10V 1UF	
C8004	F1H1A105A025	C CHIP 10V 1UF	
C8006	F1G1A1040006	C CHIP 10V 0.1UF	
C8007	F1G1A1040006	C CHIP 10V 0.1UF	
C8008	F1G1A1040006	C CHIP 10V 0.1UF	
C8009	F1J1A106A024	C CHIP 10V 10UF	
C8010	F1J1A106A024	C CHIP 10V 10UF	
C8011	F1G1A1040006	C CHIP 10V 0.1UF	
C8012	F1G1A1040006	C CHIP 10V 0.1UF	
C8013	F1G1A1040006	C CHIP 10V 0.1UF	
C8014	F1G1A1040006	C CHIP 10V 0.1UF	
C8015	F1H1A105A025	C CHIP 10V 1UF	
C8016	F1H1A105A025	C CHIP 10V 1UF	
C8017	F1J1A106A024	C CHIP 10V 10UF	
C8018	F1G1A1040006	C CHIP 10V 0.1UF	
C8019	F1G1A1040006	C CHIP 10V 0.1UF	
C8020	F1G1A1040006	C CHIP 10V 0.1UF	
C8021	F1G1A1040006	C CHIP 10V 0.1UF	
C8022	F1H1A105A025	C CHIP 10V 1UF	
C8023	F1J1A106A024	C CHIP 10V 10UF	
C8024	F1J1A106A024	C CHIP 10V 10UF	
C8025	F1G1A1040006	C CHIP 10V 0.1UF	
C8026	F1G1A1040006	C CHIP 10V 0.1UF	
C8027	F1G1A1040006	C CHIP 10V 0.1UF	
C8028	F1G1A1040006	C CHIP 10V 0.1UF	
C8029	F1G1A1040006	C CHIP 10V 0.1UF	
C8030	F1H1A105A025	C CHIP 10V 1UF	
C8031	F1H1A105A025	C CHIP 10V 1UF	
C8032	F1J1A106A024	C CHIP 10V 10UF	
C8033	F1G1A1040006	C CHIP 10V 0.1UF	
C8034	F1G1A1040006	C CHIP 10V 0.1UF	
C8037	F1G1A1040006	C CHIP 10V 0.1UF	
C8038	F1G1A1040006	C CHIP 10V 0.1UF	
C8051	F1G1A1040006	C CHIP 10V 0.1UF	
C8052	F1H1A105A025	C CHIP 10V 1UF	
C8053	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8056	F1G1A1040006	C CHIP 10V 0.1UF	
C8057	F1G1A1040006	C CHIP 10V 0.1UF	
C8058	F1J1A106A024	C CHIP 10V 10UF	
C8067	ECJ1VB1H103K	C CHIP 50V 0.01UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C8068	F1H1C104A065	C CHIP 16V 0.1UF	
C8069	ECJ1VC1H820J	C CHIP 50V 82PF	
C8070	F1G1A1040006	C CHIP 10V 0.1UF	
C8071	F1G1A1040006	C CHIP 10V 0.1UF	
C8072	F1G1A1040006	C CHIP 10V 0.1UF	
C8073	F1G1A1040006	C CHIP 10V 0.1UF	
C8074	F1G1A1040006	C CHIP 10V 0.1UF	
C8075	F1J0G2260001	C CHIP 4V 22UF	
C8080	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8082	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8083	ECJ1VB1C473K	C CHIP 16V 0.047UF	
C8086	F1G1A1040006	C CHIP 10V 0.1UF	
C8087	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8088	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8089	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8201	F1H1C104A065	C CHIP 16V 0.1UF	
C8206	F1G1A1040006	C CHIP 10V 0.1UF	
C8207	F1G1A1040006	C CHIP 10V 0.1UF	
C8208	F1G1A1040006	C CHIP 10V 0.1UF	
C8209	F1G1A1040006	C CHIP 10V 0.1UF	
C8211	F1G1A1040006	C CHIP 10V 0.1UF	
C8212	F1G1A1040006	C CHIP 10V 0.1UF	
C8213	F1G1A1040006	C CHIP 10V 0.1UF	
C8214	F1J1A106A024	C CHIP 10V 10UF	
C8215	F1J1A106A024	C CHIP 10V 10UF	
C8216	F1G1A1040006	C CHIP 10V 0.1UF	
C8217	F1G1A1040006	C CHIP 10V 0.1UF	
C8218	F1G1A1040006	C CHIP 10V 0.1UF	
C8219	F1G1A1040006	C CHIP 10V 0.1UF	
C8405	F1H1C104A065	C CHIP 16V 0.1UF	
C8406	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C8816	F1J1A106A024	C CHIP 10V 10UF	
C8821	ECJ1VC1H101J	C CHIP 50V 100PF	
C8871	ECJ1VC1H100D	C CHIP 50V 10PF	
C8872	F1H1H150A230	C CHIP 50V 15PF	
C8873	F1H1C104A065	C CHIP 16V 0.1UF	
C8874	F1H1C104A065	C CHIP 16V 0.1UF	
C8875	F1H1C104A065	C CHIP 16V 0.1UF	
C8876	F1H1C104A065	C CHIP 16V 0.1UF	
C8877	F1H1C104A065	C CHIP 16V 0.1UF	
C8878	F1H1C104A065	C CHIP 16V 0.1UF	
C8879	F1H1C104A065	C CHIP 16V 0.1UF	
C8880	F1H1C104A065	C CHIP 16V 0.1UF	
C8881	F1H1C104A065	C CHIP 16V 0.1UF	
C8882	F1H1C104A065	C CHIP 16V 0.1UF	
C8885	F1H1C104A065	C CHIP 16V 0.1UF	
C8887	F1H1C104A065	C CHIP 16V 0.1UF	
C8888	F1H1C104A065	C CHIP 16V 0.1UF	
C8889	F1H1C104A065	C CHIP 16V 0.1UF	
C8890	F1H1C104A065	C CHIP 16V 0.1UF	
C8891	F1H1C104A065	C CHIP 16V 0.1UF	
C8892	F1H1C104A065	C CHIP 16V 0.1UF	
C8893	F1H1C104A065	C CHIP 16V 0.1UF	
C8895	F1H1C104A065	C CHIP 16V 0.1UF	
C8896	F1H1C104A065	C CHIP 16V 0.1UF	
C8901	F1H1C104A065	C CHIP 16V 0.1UF	
C8902	F1H1C104A065	C CHIP 16V 0.1UF	
C8903	F1H1C104A065	C CHIP 16V 0.1UF	
C8904	F1H1C104A065	C CHIP 16V 0.1UF	
C8905	F1H1C104A065	C CHIP 16V 0.1UF	
C8906	F1H1C104A065	C CHIP 16V 0.1UF	
C8907	F1H1C104A065	C CHIP 16V 0.1UF	
C8908	F1H1C104A065	C CHIP 16V 0.1UF	
C8909	F1H1C104A065	C CHIP 16V 0.1UF	
C8910	F1H1C104A065	C CHIP 16V 0.1UF	
C8911	F1H1C104A065	C CHIP 16V 0.1UF	
C8912	F1H1C104A065	C CHIP 16V 0.1UF	
C8913	F1H1C104A065	C CHIP 16V 0.1UF	
C8914	F1H1C104A065	C CHIP 16V 0.1UF	
C8915	F1H1C104A065	C CHIP 16V 0.1UF	
C8916	F1J1A106A024	C CHIP 10V 10UF	
C8917	F1H1C104A065	C CHIP 16V 0.1UF	
C8918	F1H1A105A025	C CHIP 10V 1UF	
C8920	F1G1H1020008	C CHIP 50V 1000PF	
C8921	F1G1H1020008	C CHIP 50V 1000PF	
C8922	F1G1C103A048	C CHIP 16V 0.01UF	
C8923	F1G1C103A048	C CHIP 16V 0.01UF	
C8924	ECJ0EC1H270J	C CHIP 50V 27PF	
C8925	F1G1H120A422	C CHIP 50V 12PF	
C8926	F1G1H120A422	C CHIP 50V 12PF	
C8927	ECJ0EC1H270J	C CHIP 50V 27PF	
C8928	ECJ0EC1H101J	C CHIP 50V 100PF	
C8929	ECJ0EC1H101J	C CHIP 50V 100PF	
C8930	F1G1H470A557	C CHIP 50V 47PF	
C8931	F1G1H470A557	C CHIP 50V 47PF	
C8947	F1J1A106A024	C CHIP 10V 10UF	
C8954	F1J1A106A024	C CHIP 10V 10UF	
C8955	F1J1A106A024	C CHIP 10V 10UF	
C8956	F1J1A106A024	C CHIP 10V 10UF	
C8959	F1H1C104A065	C CHIP 16V 0.1UF	

FILTERS

Ref. No.	Part No.	Part Name & Description	Remarks
FL8201	J0HAAA000013	FILTER FOR EMI / EMC	
FL8202	J0HAAA000013	FILTER FOR EMI / EMC	
FL8803	J0MAB0000164	FILTER	
FL8813	J0MAB0000164	FILTER	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L1101	G1C220MA0234	COIL CHIP 22UH	
L1102	G1C100MA0234	COIL CHIP 10UH	
L1103	G1C100ZA0083	COIL CHIP 10UH	
L1104	G1C100ZA0083	COIL CHIP 10UH	
L1105	G1C220MA0234	COIL CHIP 22UH	
L1106	G1C100ZA0083	COIL CHIP 10UH	
L1107	G1C100MA0234	COIL CHIP 10UH	
L1108	J0JHC0000031	EMI FILTER CHIP	
L1109	G1C100MA0173	COIL CHIP 10UH	
L1110	J0JHC0000031	EMI FILTER CHIP	
L1111	J0JHC0000031	EMI FILTER CHIP	
L1112	J0JHC0000031	EMI FILTER CHIP	
L1113	J0JHC0000031	EMI FILTER CHIP	
L1114	J0JBC0000014	BEAD INDUCTOR CHIP	
L1115	J0JBC0000014	BEAD INDUCTOR CHIP	
L1116	J0JHC0000031	EMI FILTER CHIP	
L1118	J0JHC0000031	EMI FILTER CHIP	
L1119	J0JHC0000031	EMI FILTER CHIP	
L1120	J0JHC0000031	EMI FILTER CHIP	
L1121	J0JHC0000031	EMI FILTER CHIP	
L1122	J0JHC0000031	EMI FILTER CHIP	
L1123	J0JHC0000031	EMI FILTER CHIP	
L1201	G1C100MA0234	COIL CHIP 10UH	
L1202	G1C100ZA0083	COIL CHIP 10UH	
L1203	G1C100MA0234	COIL CHIP 10UH	
L3001	G1C470K00019	COIL CHIP 47UH	
L3003	J0JCC0000077	EMI FILTER CHIP	
L3004	J0JBC0000014	BEAD INDUCTOR CHIP	
L3005	J0JBC0000014	BEAD INDUCTOR CHIP	
L3006	J0JBC0000014	BEAD INDUCTOR CHIP	
L3007	J0JBC0000014	BEAD INDUCTOR CHIP	
L3008	J0JBC0000014	BEAD INDUCTOR CHIP	
L3009	J0JBC0000014	BEAD INDUCTOR CHIP	
L3010	J0JBC0000014	BEAD INDUCTOR CHIP	
L3011	J0JBC0000014	BEAD INDUCTOR CHIP	
L3012	J0JBC0000014	BEAD INDUCTOR CHIP	
L3013	J0JBC0000014	BEAD INDUCTOR CHIP	
L3014	J0JBC0000014	BEAD INDUCTOR CHIP	
L3015	J0JBC0000014	BEAD INDUCTOR CHIP	
L3016	J0JBC0000014	BEAD INDUCTOR CHIP	
L3017	J0JBC0000014	BEAD INDUCTOR CHIP	
L3018	J0JHC0000078	EMI FILTER CHIP	
L3019	J0JBC0000014	BEAD INDUCTOR CHIP	
L4001	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L4002	J0JHC0000078	EMI FILTER CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
L4003	J0JCC0000077	EMI FILTER CHIP	
L4004	G1C101KA0055	COIL CHIP 100UH	
L4501	G1C100MA0173	COIL CHIP 10UH	
L4502	G1C100MA0173	COIL CHIP 10UH	
L4503	G1C100MA0173	COIL CHIP 10UH	
L4504	G1C100MA0173	COIL CHIP 10UH	
L4505	ERJ8GEY0R00V	MGF CHIP 1/8W 0	
L5000	J0JHC0000078	EMI FILTER CHIP	
L5001	J0JHC0000031	EMI FILTER CHIP	
L5002	J0JHC0000031	EMI FILTER CHIP	
L5003	J0JHC0000031	EMI FILTER CHIP	
L5004	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5005	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5006	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5007	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5008	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5009	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5010	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5011	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5012	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5013	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5014	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5015	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5016	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5017	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5018	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5019	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5020	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5021	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5022	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5023	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5024	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5025	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5026	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5027	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5028	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5029	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5030	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5031	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5032	J0JYC0000014	FILTER FOR EMI / EMC (BEADS CORES)	
L5500	J0JHC0000045	EMI FILTER CHIP	
L5501	J0JHC0000045	EMI FILTER CHIP	
L5502	J0JHC0000045	EMI FILTER CHIP	
L5503	J0JHC0000045	EMI FILTER CHIP	
L5504	J0JHC0000078	EMI FILTER CHIP	
L5505	J0JHC0000078	EMI FILTER CHIP	
L5506	J0JHC0000078	EMI FILTER CHIP	
L5507	J0JHC0000078	EMI FILTER CHIP	
L5508	J0JHC0000045	EMI FILTER CHIP	
L5512	J0JCC0000077	EMI FILTER CHIP	
L5515	J0JHC0000078	EMI FILTER CHIP	
L5516	J0JHC0000078	EMI FILTER CHIP	
L5518	J0JHC0000078	EMI FILTER CHIP	
L5520	J0JHC0000078	EMI FILTER CHIP	
L5521	J0JHC0000078	EMI FILTER CHIP	
L5522	G1C101KA0055	COIL CHIP 100UH	
L6001	J0JHC0000031	EMI FILTER CHIP	
L6002	J0JHC0000078	EMI FILTER CHIP	
L6003	J0JBC0000080	BEAD INDUCTOR CHIP	
L6004	J0JBC0000080	BEAD INDUCTOR CHIP	
L6005	J0JBC0000080	BEAD INDUCTOR CHIP	
L6006	J0JBC0000080	BEAD INDUCTOR CHIP	
L6007	J0JBC0000080	BEAD INDUCTOR CHIP	
L6008	J0JBC0000080	BEAD INDUCTOR CHIP	
L7003	J0JHC0000031	EMI FILTER CHIP	
L7101	J0JHC0000078	EMI FILTER CHIP	
L7102	G1C100KA0009	COIL CHIP 10UH	
L7103	J0JCC0000077	EMI FILTER CHIP	
L7104	J0JCC0000077	EMI FILTER CHIP	
L7105	J0JHC0000078	EMI FILTER CHIP	
L7106	J0JHC0000078	EMI FILTER CHIP	
L7107	J0JHC0000078	EMI FILTER CHIP	
L7116	J0JHC0000078	EMI FILTER CHIP	
L7117	J0JHC0000078	EMI FILTER CHIP	
L7118	J0JHC0000078	EMI FILTER CHIP	
L7119	J0JHC0000078	EMI FILTER CHIP	
L7120	J0JCC0000077	EMI FILTER CHIP	
L7121	J0JCC0000077	EMI FILTER CHIP	
L8001	J0JHC0000045	EMI FILTER CHIP	
L8002	J0JHC0000045	EMI FILTER CHIP	
L8003	J0JHC0000045	EMI FILTER CHIP	
L8004	J0JHC0000045	EMI FILTER CHIP	
L8005	J0JHC0000045	EMI FILTER CHIP	
L8006	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
L8007	J0JHC0000045	EMI FILTER CHIP	
L8008	J0JHC0000045	EMI FILTER CHIP	
L8009	J0JHC0000045	EMI FILTER CHIP	
L8010	J0JHC0000045	EMI FILTER CHIP	
L8201	J0JCC0000077	EMI FILTER CHIP	
L8401	J0JCC0000077	EMI FILTER CHIP	
L8817	G1CR22JA0020	COIL CHIP 0.22UH	
L8818	G1CR22JA0020	COIL CHIP 0.22UH	
L8819	G1CR39JA0020	COIL CHIP 0.39UH	
L8821	J0JHC0000045	EMI FILTER CHIP	
L8824	J0JHC0000045	EMI FILTER CHIP	
L8825	J0JHC0000045	EMI FILTER CHIP	
L8826	J0JCC0000100	EMI FILTER CHIP	
L8827	J0JCC0000100	EMI FILTER CHIP	
L8828	J0JHC0000045	EMI FILTER CHIP	

CRYSTAL OSCILLATOR

Ref. No.	Part No.	Part Name & Description	Remarks
X4001	H0J245500082	SURFACE MOUNTING CRYSTAL RESONATORS	
X5500	H0J270500113	SURFACE MOUNTING CRYSTAL RESONATORS	
X6001	H0J100500035	SURFACE MOUNTING CRYSTAL RESONATORS	
X7101	H0J270500087	CRYSTAL OSCILLATOR CHIP	
X8001	H0J270500114	SURFACE MOUNTING CRYSTAL RESONATORS	
X8801	H0J250500079	SURFACE MOUNTING CRYSTAL RESONATORS	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN1101	K1KA14AA0153	CONNECTOR 14P	
CN1102	K1KA02AA0150	CONNECTOR 2P	
CN3001	K1KB35BA0023	CONNECTOR 35P	
CN3002	K1FY115B0005	B-SUB JACK SOCKET	
CN4501	K1KA06AA0150	CONNECTOR 6P	
CN5500	K1FA119E0002	HDMI JACK SOCKET	
CN5501	K1FA119E0002	HDMI JACK SOCKET	

Ref. No.	Part No.	Part Name & Description	Remarks
CN5503	K1KA30AA0009	CONNECTOR 30P	
CN6003	K1KA08AA0150	CONNECTOR 8P	
CN6005	K1KA07AA0104	CONNECTOR 7P	
CN7001	K1KB50AA0225	CONNECTOR 50P	
CN7101	K1KA07AA0266	CONNECTOR 7P	
CN7102	K1KA07AA0266	CONNECTOR 7P	
CN8201	K1KA12AA0105	CONNECTOR 12P	
CN8401	K1KA04AA0104	CONNECTOR 4P	
CN8403	K1KA11AA0105	CONNECTOR 11P	
CN8801	K1KB20A00165	CONNECTOR 20P	

JACK

Ref. No.	Part No.	Part Name & Description	Remarks
JK3101	K2HC1YYB0001	JACKS FOR SMALL SIGNAL (EQUIPMENT SIDE)	

13.4.2. DRIVE P.C.B.

INTEGRATED CIRCUITS

Ref. No.	Part No.	Part Name & Description	Remarks
IC2001	C0ABCZ000008	IC, LINEAR	
or IC2001	C0ABCA000064	IC, LINEAR	
IC2002	C0ABCZ000008	IC, LINEAR	
or IC2002	C0ABCA000064	IC, LINEAR	
IC2003	C0ABCZ000008	IC, LINEAR	
or IC2003	C0ABCA000064	IC, LINEAR	
IC2004	C0JBAR000359	IC, LOGIC	E.S.D.
IC2202	C0ABCZ000008	IC, LINEAR	
or IC2202	C0ABCA000064	IC, LINEAR	
IC2501	C1AB00002619	IC, LINEAR	CSP
IC2701	C0DBEKG00004	IC, LINEAR	
IC2702	C0DBZHG00012	IC, LINEAR	
IC2703	C0DBAYY00219	IC, LINEAR	
IC2704	C0DBZFG00012	IC, LINEAR	
IC2706	C0DBAYY00214	IC, LINEAR	
IC2901	C0JBCZ000519	IC, LOGIC	E.S.D.
IC2902	C0JBCZ000519	IC, LOGIC	E.S.D.
IC2903	C0CBCBC00130	IC, LINEAR	
IC2904	C0CBCBC00130	IC, LINEAR	

TRANSISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
Q2001	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q2002	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q2002	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q2002	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q2003	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q2004	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q2004	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q2004	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q2005	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q2006	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q2006	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q2006	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q2007	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q2008	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q2008	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q2008	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q2009	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q2010	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q2010	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q2010	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q2011	2SD1819AHL	TRANSISTOR SI NPN CHIP	
Q2012	2SB1218AHL	TRANSISTOR SI PNP CHIP	
or Q2012	B1ADCF000063	TRANSISTOR SI PNP CHIP	
or Q2012	B1ADCF000075	TRANSISTOR SI PNP CHIP	
Q2701	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q2701	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q2701	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q2702	2SD1819A0L	TRANSISTOR SI NPN CHIP	
or Q2702	B1ABCF000020	TRANSISTOR SI NPN CHIP	
or Q2702	B1ABCF000112	TRANSISTOR SI NPN CHIP	
Q2703	B1DHDC000028	TRANSISTOR SI FET CHIP	
Q2704	B1DHCC000034	TRANSISTOR SI FET CHIP	
Q2705	B1CHPD000003	TRANSISTOR FET	
Q2706	B1CHPD000003	TRANSISTOR FET	
Q2707	2SC559200L	TRANSISTOR SI NPN CHIP	

DIODES

Ref. No.	Part No.	Part Name & Description	Remarks
D2701	B0ECKP000002	DIODE SI CHIP	
D2702	B0ECKP000002	DIODE SI CHIP	
D2703	MA24D5400B	SCHOTTKY BARRIER DIODES	
D2704	MA24D5400B	SCHOTTKY BARRIER DIODES	
D2705	MA2J111008	DIODE SI CHIP	
or D2705	B0ACCK000005	DIODE SI CHIP	
or D2705	MA2J11100L	DIODE SI CHIP	
D2706	B0ECKP000002	DIODE SI CHIP	
D2707	B0ECKP000002	DIODE SI CHIP	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Remarks
R2005	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2006	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2007	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R2008	EXB38V102JV	ARRAY CHIP 1K	
R2009	EXB38V102JV	ARRAY CHIP 1K	
R2010	EXB38V102JV	ARRAY CHIP 1K	
R2011	EXB38V102JV	ARRAY CHIP 1K	
R2012	EXB38V102JV	ARRAY CHIP 1K	
R2013	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2014	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2015	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2016	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2017	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2018	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2019	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2020	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2021	EXB38V102JV	ARRAY CHIP 1K	
R2022	EXB38V102JV	ARRAY CHIP 1K	
R2023	EXB38V102JV	ARRAY CHIP 1K	
R2024	EXB38V102JV	ARRAY CHIP 1K	
R2025	EXB38V102JV	ARRAY CHIP 1K	
R2026	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R2027	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R2028	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R2029	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R2030	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2031	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2033	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2034	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2035	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2036	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2037	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2039	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2041	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	

Ref. No.	Part No.	Part Name & Description	Remarks
R2043	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2045	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2047	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2048	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2049	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2050	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2051	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2052	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R2053	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R2054	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R2055	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2056	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2057	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2058	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R2059	ERJ3GEYJ472V	MGF CHIP 1/16W 4.7K	
R2060	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2061	ERJ3GEYJ100V	MGF CHIP 1/16W 10	
R2062	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2063	ERJ3GEYJ512V	MGF CHIP1/16W 5.1K	
R2064	ERJ3GEYJ512V	MGF CHIP1/16W 5.1K	
R2065	ERJ3GEYJ512V	MGF CHIP1/16W 5.1K	
R2112	EXB38V102JV	ARRAY CHIP 1K	
R2113	EXB38V102JV	ARRAY CHIP 1K	
R2114	EXB38V102JV	ARRAY CHIP 1K	
R2115	EXB38V102JV	ARRAY CHIP 1K	
R2116	EXB38V102JV	ARRAY CHIP 1K	
R2117	EXB38V102JV	ARRAY CHIP 1K	
R2118	EXB38V102JV	ARRAY CHIP 1K	
R2119	EXB38V102JV	ARRAY CHIP 1K	
R2120	EXB38V102JV	ARRAY CHIP 1K	
R2121	EXB38V102JV	ARRAY CHIP 1K	
R2123	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2125	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2127	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2129	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2131	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2134	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2136	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2137	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2138	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2205	EXB38V102JV	ARRAY CHIP 1K	
R2206	EXB38V102JV	ARRAY CHIP 1K	
R2207	EXB38V102JV	ARRAY CHIP 1K	
R2208	EXB38V102JV	ARRAY CHIP 1K	
R2209	EXB38V102JV	ARRAY CHIP 1K	
R2210	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2211	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2212	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2213	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2214	EXB38V102JV	ARRAY CHIP 1K	
R2215	EXB38V102JV	ARRAY CHIP 1K	
R2216	EXB38V102JV	ARRAY CHIP 1K	
R2217	EXB38V102JV	ARRAY CHIP 1K	
R2218	EXB38V102JV	ARRAY CHIP 1K	
R2219	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R2220	ERJ6GEYJ561V	MGF CHIP 1/10W 560	
R2221	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2223	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2224	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2225	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2227	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2229	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2231	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2233	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2236	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2238	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2239	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2240	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2501	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2502	EXB28V820JX	ARRAY CHIP 82	
R2503	EXB28V820JX	ARRAY CHIP 82	
R2504	EXB28V820JX	ARRAY CHIP 82	
R2505	EXB28V820JX	ARRAY CHIP 82	

Ref. No.	Part No.	Part Name & Description	Remarks
R2506	EXB28V820JX	ARRAY CHIP 82	
R2507	EXB28V820JX	ARRAY CHIP 82	
R2508	EXB28V820JX	ARRAY CHIP 82	
R2509	EXB28V820JX	ARRAY CHIP 82	
R2510	EXB28V820JX	ARRAY CHIP 82	
R2511	EXB28V820JX	ARRAY CHIP 82	
R2512	EXB28V820JX	ARRAY CHIP 82	
R2513	EXB28V820JX	ARRAY CHIP 82	
R2514	EXB28V820JX	ARRAY CHIP 82	
R2515	EXB28V820JX	ARRAY CHIP 82	
R2516	EXB28V820JX	ARRAY CHIP 82	
R2517	EXB28V820JX	ARRAY CHIP 82	
R2518	EXB28V820JX	ARRAY CHIP 82	
R2519	EXB28V820JX	ARRAY CHIP 82	
R2520	EXB28V820JX	ARRAY CHIP 82	
R2521	EXB28V820JX	ARRAY CHIP 82	
R2522	EXB28V820JX	ARRAY CHIP 82	
R2523	EXB28V820JX	ARRAY CHIP 82	
R2524	EXB28V820JX	ARRAY CHIP 82	
R2525	EXB28V820JX	ARRAY CHIP 82	
R2526	EXB28V820JX	ARRAY CHIP 82	
R2527	EXB28V820JX	ARRAY CHIP 82	
R2528	EXB28V820JX	ARRAY CHIP 82	
R2529	EXB28V820JX	ARRAY CHIP 82	
R2530	EXB28V820JX	ARRAY CHIP 82	
R2531	EXB28V820JX	ARRAY CHIP 82	
R2532	EXB28V820JX	ARRAY CHIP 82	
R2533	EXB28V820JX	ARRAY CHIP 82	
R2534	EXB28V820JX	ARRAY CHIP 82	
R2535	EXB28V820JX	ARRAY CHIP 82	
R2536	EXB28V820JX	ARRAY CHIP 82	
R2537	EXB28V820JX	ARRAY CHIP 82	
R2538	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2539	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2540	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2701	ERJ3GEYJ562V	MGF CHIP 1/16W 5.6K	
R2703	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R2704	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R2705	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2707	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R2708	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2709	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2711	D1BDR062A042	MGF CHIP 1/10W 62	
R2713	ERJ3GEYJ561V	MGF CHIP 1/16W 560	
R2714	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R2716	ERJ3GEYJ303V	MGF CHIP1/16W 30K	
R2717	ERA3YED103V	MGF CHIP 1/16W 10K	
R2718	ERA3YED332V	MGF CHIP 1/16W 3.3K	
R2719	ERJ6GEY0R00V	MGF CHIP 1/10W 0	
R2720	ERA3YED333V	MGF CHIP 1/16W 33K	
R2721	ERJ3GEYJ333V	MGF CHIP 1/16W 33K	
R2722	ERJ3GEYJ223V	MGF CHIP 1/16W 22K	
R2723	ERA3YED562V	MGF CHIP 1/16W 5.6K	
R2724	ERJ3GEYJ271V	MGF CHIP 1/16W 270	
R2725	ERJ3GEYJ102V	MGF CHIP 1/16W 1K	
R2726	ERA3YED103V	MGF CHIP 1/16W 10K	
R2727	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2728	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2729	ERJ3GEYJ103V	MGF CHIP 1/16W 10K	
R2731	ERJ3GEYJ393V	MGF CHIP 1/16W 39K	
R2732	ERJ3GEYJ272V	MGF CHIP 1/16W 2.7K	
R2733	D1JBR102A006	FUSE 32V 0.8A	
R2901	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2902	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2903	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2904	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2905	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2906	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2907	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2908	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2909	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2910	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2911	ERJ3GEY0R00V	MGF CHIP 1/16W 0	

Ref. No.	Part No.	Part Name & Description	Remarks
R2912	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2913	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2914	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2915	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2916	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2917	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2918	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2919	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2920	ERJ3GEY0R00V	MGF CHIP 1/16W 0	
R2921	ERJ3GEYJ220V	MGF CHIP 1/16W 22	
R2922	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2923	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2924	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2925	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2926	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2927	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2928	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2929	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2930	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2931	ERJ3GEYJ101V	MGF CHIP 1/16W 100	
R2932	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2933	ERJ3GEYJ470V	MGF CHIP 1/16W 47	
R2934	EXB38V101JV	ARRAY CHIP 100	
R2935	EXB38V101JV	ARRAY CHIP 100	
R2936	EXB38V101JV	ARRAY CHIP 100	
R2937	EXB38V101JV	ARRAY CHIP 100	
R2938	EXB38V101JV	ARRAY CHIP 100	
R2939	EXB38V101JV	ARRAY CHIP 100	
R2940	EXB38V101JV	ARRAY CHIP 100	
R2941	EXB38V101JV	ARRAY CHIP 100	
R2942	EXB38V101JV	ARRAY CHIP 100	
R2943	EXB38V101JV	ARRAY CHIP 100	
R2944	EXB38V101JV	ARRAY CHIP 100	
R2945	EXB38V101JV	ARRAY CHIP 100	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Remarks
C2060	ECJ1VC1H471J	C CHIP 50V 470PF	
C2061	ECJ1VC1H471J	C CHIP 50V 470PF	
C2062	ECJ1VC1H471J	C CHIP 50V 470PF	
C2063	F1J1A2250007	C CHIP 10V 2.2UF	
C2064	F1J1A2250007	C CHIP 10V 2.2UF	
C2065	F1J1A2250007	C CHIP 10V 2.2UF	
C2066	ECJ3YB1C225K	C CHIP 16V 2.2UF	
C2067	F1J1A2250007	C CHIP 10V 2.2UF	
C2068	F1H1C104A008	C CHIP 16V 0.1UF	
C2069	F1J1A2250007	C CHIP 10V 2.2UF	
C2070	F1J1A2250007	C CHIP 10V 2.2UF	
C2072	F1J1A2250007	C CHIP 10V 2.2UF	
C2073	F1J1A2250007	C CHIP 10V 2.2UF	
C2075	F1J1A2250007	C CHIP 10V 2.2UF	
C2077	F1J1A2250007	C CHIP 10V 2.2UF	
C2079	F1J1A2250007	C CHIP 10V 2.2UF	
C2081	F1J1A2250007	C CHIP 10V 2.2UF	
C2082	EEE1EA470WP	ELECTROLYTIC CHIP 25V 47PF	
C2083	ECJ3YB1C225K	C CHIP 16V 2.2UF	
C2085	ECJ3YB1C225K	C CHIP 16V 2.2UF	
C2086	F1J1A2250007	C CHIP 10V 2.2UF	
C2087	ECJ3YB1C225K	C CHIP 16V 2.2UF	
C2092	F1J1A2250007	C CHIP 10V 2.2UF	
C2093	F1J1A2250007	C CHIP 10V 2.2UF	
C2094	F1H1H102A219	C CHIP 50V 1000PF	
C2095	F1H1H102A219	C CHIP 50V 1000PF	
C2096	F1J1A2250007	C CHIP 10V 2.2UF	
C2097	ECJ3YB1C225K	C CHIP 16V 2.2UF	
C2098	F1J1A2250007	C CHIP 10V 2.2UF	
C2099	F1J1A2250007	C CHIP 10V 2.2UF	
C2100	F1J1A2250007	C CHIP 10V 2.2UF	
C2101	F1J1A2250007	C CHIP 10V 2.2UF	
C2102	F1J1A2250007	C CHIP 10V 2.2UF	
C2103	F1J1A2250007	C CHIP 10V 2.2UF	
C2104	F1J1A2250007	C CHIP 10V 2.2UF	
C2105	F1J1A2250007	C CHIP 10V 2.2UF	
C2106	ECJ3YB1C225K	C CHIP 16V 2.2UF	
C2109	F1J1A2250007	C CHIP 10V 2.2UF	
C2110	F1J1A2250007	C CHIP 10V 2.2UF	
C2111	F1J1A2250007	C CHIP 10V 2.2UF	
C2112	F1J1A2250007	C CHIP 10V 2.2UF	
C2113	F1J1A2250007	C CHIP 10V 2.2UF	
C2114	F1J1A2250007	C CHIP 10V 2.2UF	
C2115	F1J1A2250007	C CHIP 10V 2.2UF	
C2116	F1J1A2250007	C CHIP 10V 2.2UF	
C2117	F1J1A2250007	C CHIP 10V 2.2UF	
C2118	F1J1A2250007	C CHIP 10V 2.2UF	
C2119	F1J1A2250007	C CHIP 10V 2.2UF	
C2121	F1J1A2250007	C CHIP 10V 2.2UF	
C2124	F1J1A2250007	C CHIP 10V 2.2UF	
C2125	F1J1A2250007	C CHIP 10V 2.2UF	
C2126	F1J1A2250007	C CHIP 10V 2.2UF	
C2201	F1J1A2250007	C CHIP 10V 2.2UF	
C2202	F1J1A2250007	C CHIP 10V 2.2UF	
C2203	F1J1A2250007	C CHIP 10V 2.2UF	
C2204	ECJ3YB1C225K	C CHIP 16V 2.2UF	
C2206	F1J1A2250007	C CHIP 10V 2.2UF	
C2207	F1J1A2250007	C CHIP 10V 2.2UF	
C2208	F1J1A2250007	C CHIP 10V 2.2UF	
C2209	F1J1A2250007	C CHIP 10V 2.2UF	
C2210	F1J1A2250007	C CHIP 10V 2.2UF	
C2211	F1J1A2250007	C CHIP 10V 2.2UF	
C2212	F1J1A2250007	C CHIP 10V 2.2UF	
C2213	F1J1A2250007	C CHIP 10V 2.2UF	
C2214	F1J1A2250007	C CHIP 10V 2.2UF	
C2215	F1J1A2250007	C CHIP 10V 2.2UF	
C2216	F1J1A2250007	C CHIP 10V 2.2UF	
C2218	F1J1A2250007	C CHIP 10V 2.2UF	
C2220	F1J1A2250007	C CHIP 10V 2.2UF	
C2221	ECJ3YB1C225K	C CHIP 16V 2.2UF	
C2224	F1J1A2250007	C CHIP 10V 2.2UF	
C2225	F1H1H102A219	C CHIP 50V 1000PF	
C2501	F1J1A106A024	C CHIP 10V 10UF	
C2502	F1H1E104A030	C CHIP 25V 0.1UF	
C2503	F1H1E104A030	C CHIP 25V 0.1UF	
C2504	F1H1E104A030	C CHIP 25V 0.1UF	
C2505	F1H1E104A030	C CHIP 25V 0.1UF	
C2506	F1H1E104A030	C CHIP 25V 0.1UF	
C2507	F1H1E104A030	C CHIP 25V 0.1UF	
C2508	F1H1E104A030	C CHIP 25V 0.1UF	
C2509	F1H1E104A030	C CHIP 25V 0.1UF	
C2510	F1H1E104A030	C CHIP 25V 0.1UF	
C2511	F1H1E104A030	C CHIP 25V 0.1UF	
C2512	F1J1A106A024	C CHIP 10V 10UF	
C2513	F1H1E104A030	C CHIP 25V 0.1UF	
C2514	F1H1E104A030	C CHIP 25V 0.1UF	
C2515	F1H1E104A030	C CHIP 25V 0.1UF	
C2516	F1H1E104A030	C CHIP 25V 0.1UF	
C2517	F1H1E104A030	C CHIP 25V 0.1UF	
C2518	F1H1E104A030	C CHIP 25V 0.1UF	
C2519	F1H1E104A030	C CHIP 25V 0.1UF	
C2520	F1H1E104A030	C CHIP 25V 0.1UF	
C2521	F1H1E104A030	C CHIP 25V 0.1UF	
C2522	F1J1A106A024	C CHIP 10V 10UF	
C2523	F1H1E104A030	C CHIP 25V 0.1UF	
C2524	F1H1E104A030	C CHIP 25V 0.1UF	
C2525	F1H1E104A030	C CHIP 25V 0.1UF	
C2526	F1H1E104A030	C CHIP 25V 0.1UF	
C2527	F1H1E104A030	C CHIP 25V 0.1UF	
C2528	F1H1E104A030	C CHIP 25V 0.1UF	
C2529	F1H1E104A030	C CHIP 25V 0.1UF	
C2530	F1H1E104A030	C CHIP 25V 0.1UF	
C2531	F1H1E104A030	C CHIP 25V 0.1UF	
C2547	F1J1A106A024	C CHIP 10V 10UF	
C2548	ECJ1VB0J105K	C CHIP 6.3V 1UF	
C2549	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C2701	F1J1A106A024	C CHIP 10V 10UF	
C2703	F1J1A106A024	C CHIP 10V 10UF	
C2705	F1H1C104A065	C CHIP 16V 0.1UF	

Ref. No.	Part No.	Part Name & Description	Remarks
C2707	F1H1C104A065	C CHIP 16V 0.1UF	
C2708	F1H1C104A065	C CHIP 16V 0.1UF	
C2710	F1J0J2260004	C CHIP 6.3V 22UF	
C2712	F1H1H332A219	C CHIP 50V 3300PF	
C2714	F1L1C2260012	C CHIP 16V 22UF	
C2715	F2G1C2200012	ELECTROLYTIC CHIP 16V 22UF	
C2716	F2G1C2200012	ELECTROLYTIC CHIP 16V 22UF	
C2718	EEE1AA470WR	ELECTROLYTIC CHIP 10V 47PF	
C2719	EEE1AA470WR	ELECTROLYTIC CHIP 10V 47PF	
C2721	F2G1C2200012	ELECTROLYTIC CHIP 16V 22UF	
C2722	F2G0J3310025	ELECTROLYTIC CHIP 6.3V 330UF	
C2723	F1K1C1060001	C CHIP 16V 10UF	
C2725	F1J1A106A024	C CHIP 10V 10UF	
C2726	F1H1A105A025	C CHIP 10V 1UF	
C2727	ECJ1VB1H331K	C CHIP 50V 330PF	
C2728	F1H1C104A065	C CHIP 16V 0.1UF	
C2729	F1J1A2250007	C CHIP 10V 2.2UF	
C2730	F1H1H471A189	C CHIP 50V 470PF	
C2731	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C2732	F1H1H472A219	C CHIP 50V 4700PF	
C2733	ECJ1VB1H103K	C CHIP 50V 0.01UF	
C2734	ECJ1VF1H103Z	C CHIP 50V 0.01UF	
C2901	F1H1H102A219	C CHIP 50V 1000PF	
C2902	F1H1A105A025	C CHIP 10V 1UF	
C2903	F1H1A105A025	C CHIP 10V 1UF	
C2904	F1H1A105A025	C CHIP 10V 1UF	
C2905	F1H1A105A025	C CHIP 10V 1UF	
C2906	F1K1C1060001	C CHIP 16V 10UF	
C2907	F1K1C1060001	C CHIP 16V 10UF	
C2908	F1H1E104A030	C CHIP 25V 0.1UF	
C2909	F1J1A106A024	C CHIP 10V 10UF	
C2910	F1H1E104A030	C CHIP 25V 0.1UF	
C2911	F1J1A106A024	C CHIP 10V 10UF	
C2912	F1H1E104A030	C CHIP 25V 0.1UF	
C2913	F1J1A106A024	C CHIP 10V 10UF	
C2914	F1H1E104A030	C CHIP 25V 0.1UF	
C2915	F1J1A106A024	C CHIP 10V 10UF	
C2917	F1H1E104A030	C CHIP 25V 0.1UF	
C2918	F1H1E104A030	C CHIP 25V 0.1UF	
C2919	F1H1E104A030	C CHIP 25V 0.1UF	
C2920	F1H1E104A030	C CHIP 25V 0.1UF	
C2921	F1H1E104A030	C CHIP 25V 0.1UF	
C2922	F1H1E104A030	C CHIP 25V 0.1UF	
C2923	F1H1E104A030	C CHIP 25V 0.1UF	
C2924	F1H1E104A030	C CHIP 25V 0.1UF	
C2925	F1J1A106A024	C CHIP 10V 10UF	
C2926	F1J1A106A024	C CHIP 10V 10UF	

COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L2001	J0JCC0000077	EMI FILTER CHIP	
L2002	J0JCC0000077	EMI FILTER CHIP	
L2003	J0JCC0000077	EMI FILTER CHIP	
L2004	J0JCC0000077	EMI FILTER CHIP	
L2005	J0JCC0000181	EMI FILTER CHIP	
L2101	J0JCC0000077	EMI FILTER CHIP	
L2102	J0JCC0000077	EMI FILTER CHIP	
L2103	J0JCC0000077	EMI FILTER CHIP	
L2104	J0JCC0000077	EMI FILTER CHIP	
L2105	J0JCC0000077	EMI FILTER CHIP	
L2106	J0JCC0000077	EMI FILTER CHIP	
L2107	J0JCC0000077	EMI FILTER CHIP	
L2201	J0JCC0000077	EMI FILTER CHIP	
L2202	J0JCC0000077	EMI FILTER CHIP	
L2203	J0JCC0000077	EMI FILTER CHIP	
L2204	J0JCC0000077	EMI FILTER CHIP	
L2401	J0JDC0000105	EMI FILTER CHIP	
L2402	J0JDC0000105	EMI FILTER CHIP	
L2403	J0JDC0000105	EMI FILTER CHIP	
L2404	J0JDC0000105	EMI FILTER CHIP	
L2405	J0JDC0000105	EMI FILTER CHIP	
L2406	J0JDC0000105	EMI FILTER CHIP	
L2407	J0JDC0000105	EMI FILTER CHIP	
L2408	J0JDC0000105	EMI FILTER CHIP	
L2409	J0JDC0000105	EMI FILTER CHIP	
L2410	J0JDC0000105	EMI FILTER CHIP	
L2411	J0JDC0000105	EMI FILTER CHIP	
L2412	J0JDC0000105	EMI FILTER CHIP	
L2413	J0JDC0000105	EMI FILTER CHIP	
L2414	J0JDC0000105	EMI FILTER CHIP	
L2415	J0JDC0000105	EMI FILTER CHIP	
L2416	J0JDC0000105	EMI FILTER CHIP	
L2417	J0JDC0000105	EMI FILTER CHIP	
L2418	J0JDC0000105	EMI FILTER CHIP	
L2419	J0JDC0000105	EMI FILTER CHIP	
L2420	J0JDC0000105	EMI FILTER CHIP	
L2421	J0JDC0000105	EMI FILTER CHIP	
L2422	J0JDC0000105	EMI FILTER CHIP	
L2423	J0JDC0000105	EMI FILTER CHIP	
L2424	J0JDC0000105	EMI FILTER CHIP	
L2425	J0JDC0000105	EMI FILTER CHIP	
L2426	J0JDC0000105	EMI FILTER CHIP	
L2427	J0JDC0000105	EMI FILTER CHIP	
L2428	J0JDC0000105	EMI FILTER CHIP	
L2429	J0JDC0000105	EMI FILTER CHIP	
L2430	J0JDC0000105	EMI FILTER CHIP	
L2431	J0JDC0000105	EMI FILTER CHIP	
L2432	J0JDC0000105	EMI FILTER CHIP	
L2433	J0JDC0000105	EMI FILTER CHIP	
L2435	J0JDC0000105	EMI FILTER CHIP	
L2436	J0JDC0000105	EMI FILTER CHIP	
L2437	J0JDC0000105	EMI FILTER CHIP	
L2438	J0JDC0000105	EMI FILTER CHIP	
L2439	J0JDC0000105	EMI FILTER CHIP	
L2440	J0JDC0000105	EMI FILTER CHIP	
L2441	J0JDC0000105	EMI FILTER CHIP	
L2442	J0JDC0000105	EMI FILTER CHIP	
L2443	J0JDC0000105	EMI FILTER CHIP	
L2444	J0JDC0000105	EMI FILTER CHIP	
L2445	J0JDC0000105	EMI FILTER CHIP	
L2446	J0JDC0000105	EMI FILTER CHIP	
L2447	J0JDC0000105	EMI FILTER CHIP	
L2501	J0JDC0000105	EMI FILTER CHIP	
L2502	J0JDC0000105	EMI FILTER CHIP	
L2503	J0JDC0000105	EMI FILTER CHIP	
L2504	J0JDC0000105	EMI FILTER CHIP	
L2505	J0JDC0000105	EMI FILTER CHIP	
L2506	J0JDC0000105	EMI FILTER CHIP	
L2507	J0JDC0000105	EMI FILTER CHIP	
L2508	J0JDC0000105	EMI FILTER CHIP	
L2509	J0JDC0000105	EMI FILTER CHIP	
L2510	J0JDC0000105	EMI FILTER CHIP	
L2511	J0JDC0000105	EMI FILTER CHIP	
L2512	J0JDC0000105	EMI FILTER CHIP	
L2513	J0JDC0000105	EMI FILTER CHIP	
L2514	J0JDC0000105	EMI FILTER CHIP	
L2515	J0JDC0000105	EMI FILTER CHIP	
L2516	J0JDC0000105	EMI FILTER CHIP	
L2517	J0JDC0000105	EMI FILTER CHIP	
L2518	J0JDC0000105	EMI FILTER CHIP	
L2519	J0JDC0000105	EMI FILTER CHIP	
L2520	J0JDC0000105	EMI FILTER CHIP	
L2521	J0JDC0000105	EMI FILTER CHIP	
L2522	J0JDC0000105	EMI FILTER CHIP	
L2523	J0JDC0000105	EMI FILTER CHIP	
L2524	J0JDC0000105	EMI FILTER CHIP	
L2525	J0JDC0000105	EMI FILTER CHIP	
L2526	J0JDC0000105	EMI FILTER CHIP	
L2527	J0JDC0000105	EMI FILTER CHIP	
L2528	J0JDC0000105	EMI FILTER CHIP	
L2529	J0JDC0000105	EMI FILTER CHIP	
L2530	J0JDC0000105	EMI FILTER CHIP	
L2531	J0JDC0000105	EMI FILTER CHIP	
L2532	J0JDC0000105	EMI FILTER CHIP	
L2533	J0JDC0000105	EMI FILTER CHIP	
L2534	J0JDC0000105	EMI FILTER CHIP	

Ref. No.	Part No.	Part Name & Description	Remarks
L2535	J0JDC0000105	EMI FILTER CHIP	
L2536	J0JDC0000105	EMI FILTER CHIP	
L2537	J0JCC0000077	EMI FILTER CHIP	
L2538	J0JDC0000105	EMI FILTER CHIP	
L2539	J0JDC0000105	EMI FILTER CHIP	
L2540	J0JDC0000105	EMI FILTER CHIP	
L2541	J0JDC0000105	EMI FILTER CHIP	
L2542	J0JDC0000105	EMI FILTER CHIP	
L2543	J0JDC0000105	EMI FILTER CHIP	
L2544	J0JDC0000105	EMI FILTER CHIP	
L2545	J0JDC0000105	EMI FILTER CHIP	
L2546	J0JDC0000105	EMI FILTER CHIP	
L2547	J0JDC0000105	EMI FILTER CHIP	
L2548	J0JDC0000105	EMI FILTER CHIP	
L2549	J0JDC0000105	EMI FILTER CHIP	
L2550	J0JDC0000105	EMI FILTER CHIP	
L2551	J0JDC0000105	EMI FILTER CHIP	
L2552	J0JDC0000105	EMI FILTER CHIP	
L2553	J0JDC0000105	EMI FILTER CHIP	
L2554	J0JDC0000105	EMI FILTER CHIP	
L2555	J0JDC0000105	EMI FILTER CHIP	
L2556	J0JDC0000105	EMI FILTER CHIP	
L2557	J0JDC0000105	EMI FILTER CHIP	
L2558	J0JDC0000105	EMI FILTER CHIP	
L2559	J0JDC0000105	EMI FILTER CHIP	
L2560	J0JDC0000105	EMI FILTER CHIP	
L2561	J0JDC0000105	EMI FILTER CHIP	
L2562	J0JDC0000105	EMI FILTER CHIP	
L2563	J0JDC0000105	EMI FILTER CHIP	
L2564	J0JDC0000105	EMI FILTER CHIP	
L2565	J0JDC0000105	EMI FILTER CHIP	
L2566	J0JDC0000105	EMI FILTER CHIP	
L2567	J0JDC0000105	EMI FILTER CHIP	
L2568	J0JDC0000105	EMI FILTER CHIP	
L2569	J0JDC0000105	EMI FILTER CHIP	
L2570	J0JDC0000105	EMI FILTER CHIP	
L2571	J0JDC0000105	EMI FILTER CHIP	
L2572	J0JDC0000105	EMI FILTER CHIP	
L2573	J0JDC0000105	EMI FILTER CHIP	
L2574	J0JDC0000105	EMI FILTER CHIP	
L2575	J0JDC0000105	EMI FILTER CHIP	
L2576	J0JDC0000105	EMI FILTER CHIP	
L2577	J0JDC0000105	EMI FILTER CHIP	
L2578	J0JDC0000105	EMI FILTER CHIP	
L2579	J0JDC0000105	EMI FILTER CHIP	
L2580	J0JDC0000105	EMI FILTER CHIP	
L2581	J0JDC0000105	EMI FILTER CHIP	
L2582	J0JDC0000105	EMI FILTER CHIP	
L2583	J0JDC0000105	EMI FILTER CHIP	
L2584	J0JDC0000105	EMI FILTER CHIP	
L2585	J0JDC0000105	EMI FILTER CHIP	
L2586	J0JDC0000105	EMI FILTER CHIP	
L2587	J0JDC0000105	EMI FILTER CHIP	
L2588	J0JDC0000105	EMI FILTER CHIP	
L2589	J0JDC0000105	EMI FILTER CHIP	
L2590	J0JDC0000105	EMI FILTER CHIP	
L2591	J0JDC0000105	EMI FILTER CHIP	
L2592	J0JDC0000105	EMI FILTER CHIP	
L2593	J0JDC0000105	EMI FILTER CHIP	
L2594	J0JDC0000105	EMI FILTER CHIP	
L2595	J0JDC0000105	EMI FILTER CHIP	
L2596	J0JDC0000105	EMI FILTER CHIP	
L2597	J0JDC0000105	EMI FILTER CHIP	
L2598	J0JDC0000105	EMI FILTER CHIP	
L2599	J0JDC0000105	EMI FILTER CHIP	
L2702	G1C220MA0234	COIL CHIP 22UH	
L2703	G1C331MA0078	COIL CHIP 330UH	
L2901	J0JHC0000031	EMI FILTER CHIP	
L2912	J0JCC0000077	EMI FILTER CHIP	
L2913	J0JCC0000077	EMI FILTER CHIP	
L2914	J0JCC0000077	EMI FILTER CHIP	
L2915	J0JCC0000077	EMI FILTER CHIP	
L2916	J0JCC0000077	EMI FILTER CHIP	
L2917	J0JCC0000077	EMI FILTER CHIP	

PIN HEADERS

Ref. No.	Part No.	Part Name & Description	Remarks
CN2001	K1MY84BA0200	CONNECTOR 84P	
CN2101	K1MY84BA0200	CONNECTOR 84P	
CN2201	K1MY84BA0200	CONNECTOR 84P	
CN2901	K1KY50AA0299	CONNECTOR 50P	